

BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024.

**B.Sc. Apparel and Fashion Technology – Course Structure under CBCS
(For the candidates to be admitted from the academic year 2005-2006 onwards)**

Semester	Course	Instru. Hours / Week	Credit	Exam Hours	Marks		Total
					Int.	Ext.	
I	Language Course – I (LC)	6	4	3	25	75	100
	English Language Course – I (ELC)	6	4	3	25	75	100
	Core Course – I (CC) – Fashion Designing	6	4	3	25	75	100
	Core Course – II (CC) – Fashion Drawing and Sketching Lab	3	-	*	-	-	-
	First Allied Course –I (AC) – Traditional Indian Textiles and Costumes	5	3	3	25	75	100
	First Allied Course –II (AC) – Textile Science and Embroidery Lab	2	-	*	-	-	-
	General Interest Course (GIC)	2	2	3	25	75	100
II	Language Course – II (LC)	6	4	3	25	75	100
	English Language Course – II (ELC)	6	4	3	25	75	100
	Core Course – II (CC) – Fashion Drawing and Sketching Lab	3	4	3	25	75	100
	Core Course – III (CC) – Costume and Personal Appearance	6	4	3	25	75	100
	First Allied Course – II (AC) – Textile Science and Embroidery Lab	3	3	3	25	75	100
	First Allied Course – III (AC) – Textile Science	5	3	3	25	75	100
III	Language Course – III (LC)	6	4	3	25	75	100
	English Language Course - III (ELC)	6	4	3	25	75	100
	Core Course – IV (CC) – Sewing Technique	6	4	3	25	75	100
	Core Course – V (CC) – Sewing Technique and Pattern Making Lab	4	-	*	-	-	-
	Second Allied Course – I (AC) – Textile Dyeing	5	3	3	25	75	100
	Second Allied Course – II (AC) – Textile Dyeing and Printing Lab	3	-	*	-	-	-

IV	Language Course –IV (LC)	6	4	3	25	75	100
	English Language Course – IV (ELC)	6	4	3	25	75	100
	Core Course – V (CC) – Sewing Technique and Pattern Making Lab	2	4	3	25	75	100
	Core Course - VI (CC) – Pattern Making and Grading	6	4	3	25	75	100
	Core Course – VII (CC) – Children’s Garment and Adult’s Garment (Practical)	3	-	**	-	-	-
	Second Allied Course – II (AC) – Textile Dyeing and Printing Lab	2	3	3	25	75	100
	Second Allied Course - III (AC) – Textile Printing	5	3	3	25	75	100
V	Core Course – VII (CC) – Children’s Garment and Adult’s Garment (Practical)	3	4	3	25	75	100
	Core Course – VIII (CC) – Garment Manufacturing Technology	6	4	3	25	75	100
	Core Course – IX (CC) – Textile Testing and Quality Control	6	4	3	25	75	100
	Core Course – X (CC) – Textile Testing and Quality Control and CAD Lab	3	-	*	-	-	-
	Elective Course – I (EC)	4	3	3	25	75	100
	Elective Course – II (EC)	4	3	3	25	75	100
	Elective Course – III (EC)	4	3	3	25	75	100
VI	Core Course – X (CC) – Textile Testing and Quality Control and CAD Lab	3	4	3	25	75	100
	Core Course – XI (CC) – Computer Aided Fashion Designing	6	4	3	25	75	100
	Core Course – XII (CC) – Communication Skills and General Management	6	4	3	25	75	100
	Core Course – XIII (CC) – Fashion Merchandising	6	4	3	25	75	100
	Core Course – XIV (CC) – Quality Control in Apparel Industry	6	4	3	25	75	100
	Elective Course – IV (EC)	4	3	3	25	75	100

The Department of Apparel and Fashion Technology will offer the following Elective Courses (ECs)

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|------------------------------|---|---------------------------------------------------|
| I. Interior Decoration | } | For B.Sc. Apparel and Fashion Technology students |
| II. Cosmetology | | |
| III. Fabric Science and Care | } | For other Department students |
| IV. Soft Furnishing | | |

* Examination at the end of even semester

** Examination at the end of fifth semester

CORE COURSE I – FASHION DESIGNING

Unit I Introduction to Fashion

Meaning of Fashion, Origin of Fashion, Meaning of Fashion Designing, Classification of Fashion, Influence of Fashion; Fashion illustration and Fashion cycle.

Unit II Fashion Industry and Fashion Promotion

Fashion Industry - Boutique and its importance, present structure of Fashion industry; Textiles and materials in Fashion industry; the structure of the Fashion market. Fashion Promotion – Impact of Fashion promotion; Fashion Advertising and its objectives, fashion journalism and its objectives; Conferences, trade fairs & exhibition, Fashion show; window display. Important Fashion designers and their famous labels.

Unit III Elements of art and Principles of Design

Design – Structural design, decorative design, basic silhouette. Elements of art and principles of design. Application of principle of design in dress.

Unit IV Color

Introduction to color, color wheel (Prang & Munsell system)
Properties and qualities of color, color scheme Theories of color harmony, color and garment, color selection. Principles of combining color. Procedure for combining color.

Unit V Career in fashion

Scope of Fashion business, choosing a career in Fashion, Career in Manufacturing, Designing, Career in Retailing, Residential Buying office careers, Career in Fashion service organizations, Freelancing.

Reference:-

- 1.The Arts of Costume and personal appearance by Grace Margaret Morton – 2nd edition – John Wiley & Sons., Inc., London.
2. Elements of Fashion and Apparel Design by G.J.Sumathi – New Age International (P) Ltd, Publisher Chennai.
3. Fashion Merchandising – Fourth edition, Elaine shine jean A. Samples. Mc. Graw – Hill book Company, New York.

CORE COURSE II (A) – FASHION DRAWING AND SKETCHING LAB

1. Pencil grading and smudging techniques.
2. Human figures in proportion using 8-head theory.
3. Drawing eyes, nose, ears and lips.
4. Drawing of face and hair style.
5. Sketching of different angles of foot and palm.
6. Sketching of pleats and gathers.
7. Sketching of drapes and fringes.
8. Sketching of frills and flounces.
9. Sketching of hemlines and waist bands.
10. Sketching of seams and shirring.

FIRST ALLIED COURSE I

TRADITIONAL INDIAN TEXTILES AND COSTUMES

Unit I: - Origin of Costumes

Theories of clothing origin, Invention of needle, Development of sewing, Development of garment styles. Role of costumes. History of Indian Garments from ancient to modern times.

Unit II: - Traditional Woven Textiles

Dacca muslin, Jamdani, Chanderi, Baluchar Buttedar, Brocades- Kam Kawab, Paithani, Peethamber, Kancheepuram brocade, Banaras brocade, Himrus and Amrus, Kashmiri shawl.

Unit III: - Traditional printed and dyed Textiles

Printed Textiles: Kalamkari. Block printing, Roghan printing and other printed and painted textiles (Mata – mi- pachedi, Pabuji-ka-pad)

Dyed Textiles: Ikat, Patola, Bandhani, Laharia, Mashru

Unit IV: - Embroideries of India

Kantha of Bengal, Gujarat embroidery, Kasuti of Karnataka, Chamba roomal of Himachal, Pulkari of Punjab, Chikankari of Uttar Pradesh.

Unit V: - Costumes of India

Introduction to Traditional Indian dress. Costumes of West Bengal, Assam, Bihar, Uttar Pradesh, Rajasthan, Gujarat, Maharashtra, Punjab, Kashmir, Himachal Pradesh & South India. An introduction on Traditional ornaments of India.

Reference:-

1. Costumes of India by Dorris Flynn.
2. Traditional Indian textiles by John Gillow and Nicholas Barnard.
3. Indian embroidery by Kamala Devi Chartaphadhya.
4. Costumes and Textiles of India by Jamila Brij Bhushan.

FIRST ALLIED COURSE II (A) **TEXTILE SCIENCE AND EMBROIDERY LAB.**

1. Sample preparation for Basic Stitches.

a. Temporary Stitches.

- i) Basting – even
- ii) Uneven basting
- iii) Diagonal basting
- iv) Slip Stitch

b. Permanent Stitches

- i) Running Stitch
- ii) Hemming Stitch
- iii) Back Stitch
- iv) Run and back Stitch
- v) Over Casting Stitch
- vi) Whipping Stitch

2. Sample preparation for Hand sewing embroidery Stitch; (Any 2 samples on each type of stitches)

- a) Outline Stitch
- b) Looped stitch
- c) Flat stitch
- d) Chain stitch
- e) Knotted Stitch

3. Sample preparation for Traditional Embroidery.

- a) Kantha of Bengal
- b) Embroidery of Gujarat
- c) Kasuti of Karnataka
- d) Chamba roomal of Himachal
- e) Pulkari of Punjab
- f) Chikankari of Lucknow
- g) Metal work
- h) Bead work

4. Sample preparations for Machine Embroidery

- a) Running Stitch
- b) Granite Stitch
- c) Cording Stitch
- d) Braiding / long and short
- e) Satin Stitch

5. Embroidery on any one.

- a) Furnishing item
- b) Garment / Saree with accessories

6. Preparing an album of Tradition woven, dyed, printed and Embroidery designs and its application on Garments.

Reference:

- i) Practical clothing construction by Mary Mathews.

CORE COURSE II (B) – FASHION DRAWING AND SKETCHING LAB

Sketching the following on basic croqui.

- 1. Sketching of necklines and collars.
- 2. Sketching of sleeves and cuffs.
- 3. Sketching of pockets and yokes.
- 4. Sketching of children wear.
- 5. Sketching of pants and shirts.
- 6. Sketching of skirts and tops.
- 7. Sketching of belts and gloves.
- 8. Sketching of bags and hats.
- 9. Sketching of hosiery and neckwear
- 10. Sketching of bows and shoes.

Reference:

Costume drawing by Patrick Taylor.

CORE COURSE III – COSTUME AND PERSONAL APPEARANCE

Unit I: - Personal Appearance values:

Personal attractiveness and Social values, Development of ones clothing behaviour – Appearance affects one’s state of mind.

Unit II: - The meaning of Style:

Style versus fashion, Judgments and a sense of values, standards and sense of values, contemporary standards of style. Importance of good fabric, Importance of good workmanship & fit. Some Intangible secrets of style.

Unit III: - Personal Expression

Its relation to costumes – selection, evidence of opposing characteristics, life goals reflected in personal qualities, personal characteristics affecting costume selection, conveying individuality through costume.

Unit IV: - Selecting Becoming Clothes:

Clothes to express Temperament, clothes to improve irregular figures, Contemporary figure ideals, means of improving figures. Techniques of creating optical illusion. Individual figure faults.

Unit V: - Wardrobe Building

Introduction, Taste and clothing budget, stretching the clothing income by sewing at home. Procedure for planning wardrobe. Essential considerations in wardrobe building. Building a versatile wardrobe. Types of occasions established by convention.

Reference:

- 1.The art of Costume and personal appearance by Grace Margaret Morton – 2nd edition, John Wiley & sons Inc., London.
- 2.Fabric and Dress- Rath hone & Tarpley
- 3.Clothing construction and Wardrobe planning-Keftunin.

FIRST ALLIED COURSE II (B) – TEXTILE SCIENCE & EMBROIDERY LAB.

Fiber Identification tests

Non Technical Tests methods.

1. Visual examination and feeling test for natural and Synthetic fibers.
2. Burning Test methods for natural and Synthetic fibers.

Technical Test methods.

3. Microscopic test for natural and Synthetic fibers.
4. Solubility test for natural and Synthetic fibers.
5. Study of passage of material through carding.
6. Study of passage of material through drawing
7. Study of passage of material through Roving
8. Study of passage of material through spinning machines
9. Study of passage of material through loom.
10. Identification of woven fabric structure using pick glass.
11. Identification of knitted fabric structure.
12. Identification of Non-woven fabric structure.

FIRST ALLIED COURSE III – TEXTILE SCIENCE

Unit I: - Fiber and Yam manufacturing.

Fiber – Definition, Classification of Fiber and a brief explanation of fibers.

Yarn – Definition, Conventional ring spinning method- Passage of material through carding, doubling, combing, drawing, roving, and spinning. Yarn twist, yarn count. Types and characteristics of yarns – ply yarns, cables yarns, doubles yarns and novelty yarns and it types.

Unit II: - Yarn manufacturing.

Modern spinning methods – Passage of material through open end spinning, Friction spinning, Electrostatic spinning, Airjet spinning, Twistless spinning. Filament yarn spinning methods wet spinning, dry spinning, melt spinning, Bicomponent spinning, film splitting.

Sewing thread – construction of threads, thread sizes, thread selection

Unit III: - Weaving

Preparation for weaving (warping, sizing, looming) Basic loom structure. Weaving- Definition, Primary motion – shedding – Definition and a brief explanation, picking (shuttle and shuttless looms), beating up. Secondary motion – Definition and Ancillary motion.

Types of selvages. Construction of cloth designs - Design, draft and pegplan. Classification of weaves – plain weave, twill, Satin, Crepe, Pile, double cloth, dobby and Jacquard, Identification of woven fabric defects.

Unit IV: - Knitting.

Knitting – Definition, Comparison between woven fabrics and knitted fabric. Classification of knitted fabrics weft knitting – plan knit stitch, Rib stitch, Warp knitting - Tricot knit, Raschel Knit, Milanese Knit, Jacquard knit, pile knit, Terry knit, velour knit. Identification of knitted fabric defects.

Unit V: - (Felted and Non woven fabrics)

Felted fabrics – Felting process. Types of felt, properties and uses of felt. Non woven – Definition, classification of non-woven fabrics, web forming techniques, bonding techniques, and finishing techniques. Characteristics of non-woven, uses of non-woven fabrics.

Reference:

1. Textile – fiber to fabric – Bernard P. Corbman. Mc.Graw Hill book company, New Delhi.
2. The motivate Series – A. Wynne. Mac Milan Publishers , London
3. Textile Science – E.P.J. Gohl.
4. Textiles- Hollen & Saddler.

CORE COURSE IV – SEWING TECHNIQUE

Unit I : - Sewing Equipment

Sewing machines- parts and their function, care and maintenance. Tools for measuring, marking, cutting & pressing. Selection of thread and needle for various types of fabric.

Body measurements:

Introduction, Measurements – where and how to take them. Eight head theory – relative length and girth measures for a grown up proportionate human body. Standardizing body measurement.

Unit II: - Seams: Definition, Choice of seam, Seam types & their finishes.

Fullness: Definition, Types of fullness – Darts, Tucks, Pleats, flares, godets, gathers, shires & frills. Calculating the amount of materials for these types.

Unit III: - Sleeves and skirts.

Sleeves:- Classification of sleeves, types of sleeves- plain, puff at top, bottom, bell, bishop, circular, leg-o-mutton, sleeveless styles, kimono & raglan. Pattern preparation for these sleeves.

Skirts: Different types of skirts – Drafting patterns for flares, gathered, pleated, gored, semicircular and circular skirts.

Unit IV: - Neck finishes and yokes

Neck finishes: -Definition, Bias- definition, joining bias and uses. Bias facing and bias binding. Collars – definition, parts of collar, factors to be considered in designing collar, classification of collar. Drafting for peter pan, cape, scallop, puritan, sailors, Chinese and Turtleneck collar.

Yokes: - Definition, selection of yoke design, creating variety in yoke. Drafting patterns for yoke without fullness yoke with fullness within the yoke & yoke supporting or releasing fullness. Attachment of yokes.

Unit V: - Pockets and plackets

Pockets- Definition, classification, selection of pocket and creating variety in pockets.

Plackets- Definition, characteristics of a good placket, classification – continuous bound, bound & faced, fly opening, zipper, tailored and center front / shirt placket.

Trimmings:- Definition, types -Bias trimming, Ricrac ,ruffles, embroidery, smocking, faggoting, Applique, lace, lace motifs, Scalloped edging, decorative fastening – belts & bows.

Reference:

1. Practical clothing construction by Mary Mathew
2. Encyclopedia of dressmaking by Rahul Jewel.
3. Reader Digest sewing guide – complete guide to sewing – 13th edition, The Reader's Digest Association Inc., Pleasant Ville, New York, 1988.

CORE COURSE V – A. SEWING TECHNIQUE & PATTERN MAKING LAB.

1. Demonstrating- operating, cleaning and oiling of sewing machine.
2. Demonstration of taking body measurement.
3. Preparing samples for seams.
4. Preparing samples for seam finishes.
5. Preparing samples for darts and tucks.
6. Preparing samples for flare, frills, ruffles & godets.
7. Preparing samples for pleats and gathers.
8. Preparing samples for skirts (any 5 type)
9. Preparing samples for sleeves. (any 5 type)
10. Preparing samples for bias facing & binding

11. Preparing samples for yokes (any 2 type)
12. Preparing samples for placket (any 2 type)
13. Preparing samples for pockets (any 2 type)
14. Preparing samples for trimming (any 2 type)

SECOND ALLIED COURSE I – TEXTILE DYEING

Unit I: - Pretreatment of Fabric:

Singeing, Desizing, Scouring, bleaching, Mercerization. Synthetic fiber heat setting. wool carbonizing. Degumming and weighting of silk.

Unit II: - Dyes:

Definition, Dyes and pigments, classification of dyes – Natural dyes, Synthetic dyes – Cationic & anionic dyes, acid, mordant, direct, azoic, disperse, sulphur, vat, reactive, pigment.

Unit III: - Fiber & Yam dyeing

Fiber dyeing- Stock dyeing, Top dyeing

Yarn dyeing - Hank, package dyeing, warp beam dyeing, space dyeing. Identification of dyeing defects.

Unit IV: - Fabric & Garment dyeing

Fabric dyeing – Piece dyeing, Jigger dyeing, Beck dyeing, pad dyeing, Beam Dyeing, Jet dyeing, Vacuum impregnation, Foam dyeing, Solvent dyeing.

Garment dyeing-Special dyeing effects – cross-dyeing, union dyeing, tone-on-tone effects.

Unit V: - Color fastness & effluent treatment:

Tests to determine color fastness – fastness to washing, immersion in water, Perspiration, crocking, pressing, light, friction, Natural weather, gas fading.

Effluent treatment – Definition, Tolerance limit, and corrective steps.

Treatment of effluents.

Reference:

1. Bernard.P.Corbman, Textiles – Fiber to fabric, Mc. Graw. – Hill book Company, 1983
2. Silk dyeing & finishing handbook by Oxford & IBH Publishing Company Pvt.Ltd.
3. Technology of Textile processing, Volume – III, V, VI, VII & VIII, Sevak publications, Bombay 1981.

SECOND ALLIED COURSE II – A. TEXTILE DYEING & PRINTING LAB.

1. Desizing of cotton yarn / cloth
2. Scouring of Cotton yarn / cloth.
3. Bleaching of cotton yarn / cloth.
4. Mercerization of cotton yarn / cloth.
5. Dyeing of cotton with direct dyes.
6. Dyeing of cotton with hot brand reactive dyes.
7. Dyeing of cotton with cold brand reactive dye.
8. Dyeing of silk with acid dye.
9. Dyeing of Synthetic yarn with synthetic dye.
10. Colorfastness to Sunlight.
11. Colorfastness to Pressing
12. Colorfastness to crocking.

CORE COURSE V –B. SEWING TECHNIQUE AND PATTERN MAKING LAB

1. Preparing samples for straightening fabric grains and ends.
2. Preparing different pattern layouts for any two garments.
3. Drafting a basic bodice pattern.
4. Drafting a basic sleeve pattern.
5. Drafting a basic skirt pattern.
6. Preparing a commercial pattern for any one garment.
7. Preparing a adhesive paper dress form using standard body measurement.
8. Grading any one basic block.
9. Relocation of dart using pivot method.
10. Relocation of dart using slash and spread method.
11. Relocation of dart using measurement method.
12. Pattern alteration for basic bodice, sleeves and skirt.

CORE COURSE VI – PATTERN MAKING AND GRADING

Unit I: Fabric preparation & lay planning: Preparing the fabric for cutting, Importance of grain in fabric cutting and garment construction. Methods of straightening fabric grains.

Lay planning Introduction, Rule to remember in pattern layout. Types of layout. Transferring pattern markings, stay stitching, ease stitching.

Unit II: Drafting and Draping:

Drafting: Preparation of paper patterns. Advantages of paper pattern. Pattern drafting with personal measurement. Principles for pattern drafting. Preparing draft for basic bodice, sleeve and skirt pattern.

Drafting: Definition, types of dress form, preparation of adhesive paper dress form, Draping technique. Draping basic blocks (bodice, sleeve & skirts.).

Unit III: Flat pattern Techniques: Definition, Pivot method, Slash & spread method, measurement method. Creating styles through dart manipulation and relocation of dart.

Unit IV: Commercial pattern and pattern grading:

Commercial pattern: Definition, merits and demerits, Development of commercial pattern.

Pattern Grading: Definition, Grading terminology, selecting a grading system, grading techniques, their advantages and disadvantages. Computer grading. Grading procedures. Grading of basic block using draft grading systems.

Unit V: Pattern alteration, Garment fitting and assembling.

Pattern alteration: Methods of identifying pattern alteration. General principles for pattern alteration. Common pattern alteration in a fitted bodice pattern.

Garment fitting and Assembling: Standards for a good fit, checking for good fit, solving fitting problems and remedies.

Reference:

1. Practical clothing construction by Mary Mathew.
2. Dress making simplified by Cock.V. Block well Science publisher, 4th edition.
3. Designing patterns by Hillary Campbell, Stanley thornes publishers' ltd., New Delhi.

CORE COURSE VII – A.) CHILDREN’S GARMENT AND ADULTS GARMENT

1. Designing and constructing of any one types of baby layette/baby bed.
2. Designing and constructing of any one type of jabla or any infants garments.
3. Designing and constructing any one type of bib, bonnet and panty.
4. Designing and constructing any one type of romper.
5. Designing and constructing any one type of A-line frock.
6. Designing and constructing any one type of summer frock.
7. Designing and constructing any one type of yoke frock.
8. Designing and constructing any one type of middy & middy top.
9. Designing and constructing any one type of Bermudas/shorts.
10. Designing and constructing any one Partywear or fashionable wear for kids.

SECOND ALLIED COURSE II – B.)TEXTILE DYEING AND PRINTING LAB

1. Development of design for different printing techniques.
2. Preparing samples for batik printing.
3. Preparing samples for tie and dye printing.
4. Preparing samples for block printing.
5. Preparing a stencil card.
6. Preparing samples for stencil printing.
7. Preparing a screen.
8. Preparing samples for screen printing.
9. Preparing samples for marble printing.
10. Preparing a fabric painted sample.
11. Preparing any one article using the above printing technique.
12. Preparing an album of printed design.

SECOND ALLIED COURSE III – TEXTILE PRINTING

Unit I: Finishing – Objectives of finishing, classification of finishing, drying, calendering, sanforizing, raising and shearing, setting and heat setting, anti-crease, anti-pilling, anti-static, mildew proofing, softening, stiffening, de-lustering, flame proofing, soil-releasing finish, water proof and water repellency, starch and resin finishing. Brief explanation of all these techniques.

Unit II: Preparation for printing – Preparation of printing paste, Use of various ingredients and thickeners, preparation of cloth for printing, after treatment of printed goods - ageing, steaming, dunging, raising, fixing, curing, washing, clearing, soaping, drying, thermofixing, superheated steaming.

Unit III: Methods of printing-Printing and its significance, methods of printing-block printing, screen printing, semi –automatic screen printing, stencil printing, roller printing, flat bed screen printing, rotary screen printing, transfer printing.

Unit IV: Styles of printing- Direct Style, Discharge style, Resist style, Conversion Style, Dyed style, Madder style, Discharge cum resist style, Crimp (or) Crepon style, Batik style, Foam printing, Flock printing, Damask printing, Kalamkari printing, Bubble printing.

Unit V: Smart Textiles –Introduction, smart medical textiles, smart sports wear, wearable electronics and intelligent fashion accessories

Reference:

1. Technology of Textile Printing by R.S.Prayag, Sree J Printers, Pune
2. Textile fibres, dyes, finishes and processes by Howard L needles, Std Publishers, Delhi
3. Textile finish by R.S.Prayag, Sree J Printers, Pune

CORE COURSE VII –B.) CHILDREN’S GARMENT AND ADULTS GARMENT

1. Designing and constructing of any one types of sari petticoat / long skirt with top.
2. Designing and constructing of any one type of kameez.
3. Designing and constructing any one type of salwar / Chudidar.
4. Designing and constructing any one type of kurta.
5. Designing and constructing any one type of pyjama.
6. Designing and constructing any one type of shirt.
7. Designing and constructing any one type of pant.
8. Designing and constructing any one type of blouse / T-shirt.
9. Designing and constructing any one type of nightdress / housecoat.
10. Designing and constructing any one type of apron.
11. Designing and constructing any one type of waist coat.
12. Designing and constructing any one fashionable wear.

CORE COURSE VIII – GARMENT MANUFACTURING TECHNOLOGY

Unit I:

Planning, drawing and reproduction of the marker. The requirements of marker planning. Efficiency of the marker plan. The spreading of the fabric to form a lay. The requirement of the spreading process. Methods of spreading, nature of fabric packages. The cutting of fabric, objectiveness of cutting and methods of cutting.

Unit II:

The properties of seam seam types, stitch types. Sewing machine feed mechanism, sewing machine needles, Sewing threads, fiber type, construction of thread finishes. Thread sizing, thread packages, cost, properties and seam performance. Sewing problems, Problems of stitch formation. Problem of pucker, problems of Damage to fabric along the stitch line. Testing for sewability and Tailorability.

Unit III:

Basic sewing machines and associated work aids, simple automobiles. The use of components & trims – Labels and motifs, lining, Interlining, wadding, lace, braids & elastics, Hooks and loop fastening, Seam binding and tape, Shoulder pad, Eyelets & laces, Zip fastener, Buttons, Tack buttons, Snap fasteners and Rivets, Performance properties of components and trims.

Unit IV:

Fusing – Definition, advantages of using fusible interlinings, requirement of fusing, Fusing process. The means of fusing, Fusing equipments, Methods of fusing quality control in fusing. Alternative of fusible interlining.

Unit V:

Pressing: the purpose of pressing, categories of pressing, means of pressing, pressing equipments and methods, pleating, permanent press. State of pressing.

Reference:

1. Introduction to clothing production management – 2nd edition, A.J. Chutter, Blackwell Science, New Delhi.
2. Garment technology for Fashion Designers – Gerry Cooklin, Blackwell Science, New Delhi.
3. Introduction to clothing manufacture – Gerry cooklin, Blackwell Science, New Delhi.

CORE COURSE IX – TEXTILE TESTING AND QUALITY CONTROL

Unit I: Quality control: Definition and its importance.

Humidity: Definition and its influence on fiber properties Standard atmospheric condition, Standard testing atmosphere. Standard regain, Moisture content and regain. Measurement of atmospheric condition – wet and dry bulb Hygrometer and sling Hygrometer.

Unit II:

Fiber Testing: Fiber length – Bear sorter and Fibrograph, Fiber strength – Stelometer, Fiber fineness – Micronaire, Fiber maturity, Trash content - determination – Trash analyzer.

Unit III:

Yarn testing: Determination of yarn count – quadrant, Analytical & Beesley balance. Twist – Direction of twist and amount of twist, Twist effect on fabric properties. Strength of yarn-Single yarn strength tester. Crimp – Shirley crimp tester. Yarn appearance tester. Evenness – Uster Evenness tester, Hairiness – Uster Hairiness tester.

Unit IV:

Fabric Testing: Fabric strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester.

Unit V:

Drape – Drape meter, Fabric stiffness - Shirley stiffness Tester, crease recovery – Shirley crease recovery tester.

Reference:

1. Principles of textile testing by J.E. Booth., C.B.S., publishers & distributors, New Delhi, 1996.
2. Textile Testing by Angappan & Subramanian., S.S.M. Institute., Tiruchengodu.

CORE COURSE X
TEXTILE TESTING AND QUALITY CONTROL AND CAD LAB

1. Determining fiber length and uniformity.
2. Determination of fiber fineness.
3. Determination of fiber strength.
4. Determination of moisture content.
5. Roving and Yarn count.
6. Determination of lea strength / single yarn strength and elongation.
7. Determination of yarn twist.
8. Determination of yarn crimp.
9. Determination of breaking and bursting strength
10. Determination of fabric abrasion resistance.
11. Determination of fabric drape
12. Determination fabric stiffness.
13. Determination of fabric thickness.

CORE COURSE X
TEXTILE TESTING AND QUALITY CONTROL AND CAD LAB

1. Developing motifs using coral draw and adobe photoshop.
2. Developing weave patterns for doby weave
3. Developing weave patterns for jacquard weave
4. Developing motifs for embroidery and cross stitch
5. Developing motifs for screen printing
6. Developing patterns for pattern making and grading
7. Developing design library for garment details(Skirts , Sleeves,Cuffs,Collars,Pockets etc)
8. Developing garment designs for childrens garment with colour combination
9. Developing garment designs for mens garment with colour combination
10. Developing garment designs for womens garment with colour combination
11. Texture mapping using computers (Changing different textures of garment)
12. Bringing variation in face framing details using computers(Changing accessories ,hair style,hat,necklines,eye glasses, Make ups)

CORE COURSE XI – COMPUTER AIDED FASHION DESIGNING

Unit I

Introduction and meaning for CAD, Computer and the Fashion industry. Acceptance of new technology. Quick response technology.

Unit II

CAD in today's fashion industry. Types of CAD systems – Textile design system, illustration / sketchpad system. Texture mapping – Draping software, Embroidery system.,specification and costing system. Digitizing and grading system, marker-making systems, pattern Design software, robotics and Garment moving Technology. Commercial software systems.

Unit III

CAD from sketch to market – Conceptualization – Definition – Preproduction, Production and Promotion.

Unit IV

Silhouette – Introduction, Fashion cycle, understanding shape, fabric selection and silhouette – proportion, line, focal point, cut, fit and construction, co-ordinating silhouettes. Rendering silhouette. Computer rendering of silhouette.

Unit V

Presentation and Graphics: Introduction, External presentation, internal presentation, planning a presentation – organization and composition. Computer generated presentation, computer generated catalogues, presentation board, Multimedia and 3 – D presentation.

Reference:

1. CAD for Fashion Design. By Rene Weiss Chase., Prentice Hall, upper saddle River, London.

**CORE COURSE XII – COMMUNICATION SKILLS AND
GENERAL MANAGEMENT**

Unit I

Art of presenting one self: Introduction to interview, types of interview, guidelines, preparations for interview, specific interview. Dress code at interview, do's and don'ts at the interview, conduct at interview. Basics of body language, body postures at interview. Creating resume, personal hygiene.

Unit II

Art of public speaking: What is public speaking, strategies to fight, stage fright preparing for speech, techniques of speech, Addressing the crowd.

Unit III

The art of letter drafting and communication: ABC of Good letter drafting, organizing a letter, layout variations, structuring the letter, good and bad news letter. The communication process, oral communication, principles of effective business communication, listening and skills to improve listening habits. Effective telephone usage and etiquettes.

Unit IV

Office etiquette's and procedures: Office etiquette's towards seniors, sub ordinates, and guests. Business card etiquettes, Dinner etiquettes, time management.

Unit V

Management: Definition, functions of management, principles of management.

Reference:

1. Quiz, Zane, Margaret Johns and Dennish Mott, Introduction to Business Communication, Prentice Hall of India Private Ltd, 1981.
2. Easey M.Fashion Marketing, Blackwell Sciences, 1994.

CORE COURSE XIII – FASHION MERCHANDISING

Unit I

Fashion marketing for buyers – The fashion marketing mix, the fashion product life cycle. Customer profiles. Marketing research methods ,test marketing, Fashion product, Fashion consumer behaviour.

Unit II

Fashion Retailers – Definition, development of fashion. Types of fashion retail outlets, career in fashion Retailing, Merchandising policies.

Unit III

Trends in Fashion Retailing – Introduction, consumerism, organizational flexibility, increased competition, Growth of large-scale fashion retailing. Emerging forms of Fashion retailing.

Unit IV

Buying offices – Types of Resident buying offices, Fashion consultant, trade publications.

Unit V

The fashion office – Advertising, publicity, visual merchandising, developing a fashion image.

Reference:

1. Fashion buying by Helen go wore K., Blackwell Science, Om book Services., New Delhi.
2. Fashion merchandising – 4th edition by Elaine Stone & Jean A. Samples. McGraw Hill Book Company.
3. Marketing today's fashion by carol steward Muelle.

CORE COURSE XIV – QUALITY CONTROL IN APPAREL INDUSTRY

Unit I

Introduction to Quality- Importance of quality, managing quality through inspection, managing quality through testing. Seven tools of quality control. Current concept in quality Management.

Standard- Introduction, Benefits of Standards, level of standards, sources of standards, ISO 9000 series standards.

Unit II

Inspection Techniques -Raw material Inspection, In-process inspection, final inspection. How much to inspect. Fabric defects. Selection of Inspectors.

Unit III

Textile Testing and Production Evaluation -Precision and Accuracy of test methods. Atmospheric conditions for Testing, Strength properties of apparel, fabric stretch properties. Dimensional changes in apparel due to laundering, dry cleaning, steaming and pressing. Durable press evaluation of fabrics and apparel. Needle cutting and Yarn severance. Sewability of fabrics.

Unit IV

Textile Testing and Production Evaluation -Bow and Skewness, Fabric distortion, Fabric streak, soil / stain releasing tests. Testing of bonded and laminated apparel fabric, testing of fusible interlining. Yarn strength and Elongation, Sewing thread testing, wear testing. Flammability of clothing, Textile Flammability Testing Methods, Factors affecting fabric flammability.

Unit V

Shade sorting and care labeling -Introduction to shade sorting. Fundamental of color and color measuring. Instrumental shade sorting. General Information in care labeling. American care labeling system. International care labeling system. British care labeling system. Canadian care labeling system. Japanese care labeling system.

Reference:

1. Managing quality control in apparel Industry by P.V.Mehta and S.K. Bharadwaj., ASQC Quality Press, New York.
2. An Introduction to quality control for the apparel industry by P.V.Mehta, ASQC Quality Press, New York.

ELECTIVE COURSE I – FABRIC SCIENCE AND CARE

Unit I

Water – Sources of water, Types of hardness, methods of softening water – Alkali method, lime soda method. Zeolite or Base exchange method. Determination of hardness.

Laundry Soaps – Manufacture of soap, composition of soap, commonly available types of soap, soapless detergents, chemical action of detergents. Detergent manufacture, Advantages of modern detergents. New developments. Types of soil and method of soil removal. Phenomenon of detergency.

Unit II

Bleaches – Classification, Types of Bleaches - Open Air and Sunlight, Sodium hypochlorite, Sodium perborate, hydrogen peroxide, potassium permanganate, sodium Hydro sulphite. Application of bleaches to various fiber fabrics, the right way to bleach. Optical brighteners. Laundry blues fluorescent brightening agents (FBAS).

Stiffening Agents: Purposes of stiffening, classification of stiffening agents, Preparation and uses of stiffeners, steps in stiffening.

Unit III

Stain removal: Identification of stain, General procedures of stain removal, Home removal of stains, Points to remember, classification of stains, Principles of stain removal, classification of stain removers.

Care labels: Instruction for washing, bleaching, drying, Ironing and dry cleaning. Placement of labels in garments.

Unit IV

Laundry equipments : Household laundry equipments, Laundry procedures for various fiber fabrics – cotton, linen, wool, silk and synthetics.

Dry cleaning: Definition, dry cleaning operations, dry cleaning materials.

Unit V

Care of special items: Draperies and curtains, Rugs and carpets, Upholstery, leather and suede.

Storage of household linen and apparel: Bed linen, Bath linen, Bath accessories, Table line and Apparels.

Laundries – Types and their functioning, planning of laundry area.

Reference:

1. Fundamentals of textiles and their care by (5th edition), Sushela Dantyagi, Orient Long man ltd, New Delhi.
2. Fabric care by Noemia. D'Souza., New age International (P) ltd., Publishers, Chennai.

ELECTIVE COURSE II - INTERIOR DECORATION

Unit I Furnitures

Introduction, choosing furniture – style, design and construction, wooden furniture, wicker and cane furniture, metal furniture, plastic, upholstered furniture, requirements for furniture.

Unit II Floor and Floor Finisher

Choosing floorings - sub floors. Classification of floor finishes – hard floor finishes. Semi hard finishes, conductive (or) anti-static floor surfaces, general care and cleaning of floorings.

Unit III Wall coverings

Introduction to wall covering – Types of wall covering – paints, wall paper, plastic ware covering, fabric wall covering, wood-panelling, glass wall covering, Metal wall covering. Leather (or) hide wall covering, other materials, ceilings.

Unit IV

- a) Lighting, Heating and ventilation – Lighting and its effects, fittings and shades, uses of lighting, heating and ventilations.
- b) Flowers and flower arrangements – Types and principles of flower arrangements, artificial flowers.

Unit V Cleaning Equipments and agents

Manual equipment – brushes mop and cloths. Mechanical equipment – Vaccum cleaner, polishing machines, hot water extraction machine – choice of equipment – cleaning agent, storage and replenishment of cleaning agents.

Reference:

Hotel and Hospital housekeeping – fifth edition by John – C.Bransen Margaret lennox, Published by ELSI, inprint, Hodder and sloughton.

ELECTIVE COURSE III - COSMETOLOGY

Unit I Skin Care

Introduction to skin care. Structure of the skin, basic skin types, Routine skin care, cleansers – Masks, creams, and scrubs. Remedies for greasy skin. Face packs, Moisturizing and nourishing skin. Acne, pimples and blackheads – causes and cares. Healing sunburns and suntan. Capturing youthful looks. Anti-wrinkle cream and lotion.

Unit II Hair Care

Typology of hair, Diet, Accessories for hair care, cleaning of Accessories, Hair care programme, scalp massage, oiling and shampoo. Rinses – type. Conditioning Drying, Hair trimming, Hair setting lotions and sprays. Common Hair problems and remedies. Hair and Nutrition.

Unit III Manicure and Pedicure

Tone up hands. Nourishing hand treatment. Hand lotion and cream. Stain Removers. Sculptured nails, Diet, Nail tips. Manicure Accessories. Manicure Techniques. Clear base coat polish and its importance, Daily routing for natural beautiful nails. Nail cleansers cuticle and nail creams.

Pedicure – Foot bath. Role of sensible footwear. Foot tips. Pedicure equipment, pedicure procedure, problems of the neglected feet and their remedies.

Unit IV Alluring Eyes and Sparkling Teeth

Eyes – Care of eyes, Massages and exercises. Eye glasses and lens. Eye creams and washes. Self care for eye problem. Eye problems and care. Eyebrows – Fashioning and tweezing.

Teeth – The right tools, Dental Hygiene. Foods for teeth. Brush up on dental care. Tooth problems and remedies.

Unit V Beauty and health

Gorging. Eating the right foods to health and beauty. Food combinations. Food for thought, fruits and vegetable Beverages for beauty. The discovered vitamins and dietary sources.

Make up Accessories: Foundations, Fundamentals of perfect makeup. Powders Blushers, eye makeup, Eyelash curlers, lipstick and shaping lips.

Reference:

1. The complete beauty book by. Arlene Mathew.
2. Health Care.

ELECTIVE COURSE IV - SOFT FURNISHING

Unit I: - Floor Covering:

Carpets, Choosing Carpets, fiber used, carpet manufacturing, woven carpets, non- woven carpets. Size of carpet choice of carpets, carpet laying. Protection of carpets, cleaning of carpets, advantages & disadvantages of carpets, finishes mats & matting, cleaning of mats.

Unit II: - Living room furnishing:-

Introduction, choosing color, pattern and Texture for interiors, Sofa types, sofa covers, wall hangings, cushion and cushion covers upholstery materials. Bolster and bolster covers. Care and maintenance.

Unit III: Window and Window Treatments:-

Introduction, Parts of windows, types of windows, curtains & draperies. Definition, types, pelmets, valances and swags, Net curtains, blind loose covers, Curtain fixtures, Care & cleaning of curtains, points to remember in connection with curtains.

Unit IV: Bed linens:-

Introduction, construction of beds, cots, bed boards, other beds, cares and cleaning of beds, bedding, types of mattresses and mattress covers. Types of bed linens – Blankets, pillow, Eiderdowns, quilts and comforters, care and cleaning of bed spreads.

Unit V: Kitchen and Table Linens:-

Kitchen linens: Introduction, types of kitchen linens – Hand towels, dish cloth, kitchen apron, Mixi covers, Grinder covers, food processor cover, fridge cover, Tea cozy cover.

Table linens: Introduction, types of table linens, Table cloth, Table mats, Table napkin,. Doilies runners, protective pads, silence cloth, Towels selection of table linens.

Reference:

1. Hotel, Hostel and house keeping – fifth edition by Joan. C. Branson, Margaret lennox. Published by ELS & imprint, hodder & Stoughton.
2. Interior decoration in India by Densorkary K.S. D.B. Taraparevals sons & co. Pvt. Ltd., 1973.
3. The use of color in Interior, Hole. A.D., Mc.Graw Hill book company, Newark. 11968.
4. Soft furnishing.
