



BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024.
B.Sc. Apparel and Fashion Technology Course Structure under CBCS
(For the candidates admitted from the academic year 2010-2011 onwards)

Semester	Part	Course	Title	Instr Hours/Week	Credit	Exam Hours	Marks		Total
							Int.	Extn.	
I	I	Language Course – I (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course- I (ELC)		6	3	3	25	75	100
	III	Core Course – I (CC)	Fashion Designing	6	4	3	25	75	100
		Core Course – II (CC)	Fashion Sketching (P)	6	5	3	40	60	100
		First Allied Course –I (AC)	Fibre to Fabric	6	4	3	25	75	100
		TOTAL		30	19				500
II	I	Language Course – II (LC) - - Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course – II (ELC)		6	3	3	25	75	100
	III	Core Course – III (CC)	Costume and Personal Appearance	6	5	3	25	75	100
		First Allied Course – II (AC)	Textile Testing & Quality Control	5	4	3	25	75	100
		First Allied Course – III (AC)	Textile Testing & Quality Control - Practicals	3	2	3	40	60	100
	IV	Environmental Studies		2	2	3	25	75	100
	IV	Value Education		2	2	3	25	75	100
		TOTAL		30	21				700
III	I	Language Course – III (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course - III (ELC)		6	3	3	25	75	100
	III	Core Course – IV (CC)	Basics of Sewing	6	5	3	25	75	100
		Core Course – V (CC)	Basics of Sewing - Practicals	6	4	3	40	60	100
		Second Allied Course – I	Fashion Merchandising	4	3	3	25	75	100
	III	Non Major Elective I - for those who studied Tamil under Part I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	World Costumes	2	2	3	25	75	100
		TOTAL		30	20				600

IV	I	Language Course –IV (LC) - Tamil*/Other Languages ** #		6	3	3	25	75	100	
	II	English Language Course – IV (ELC)		6	3	3	25	75	100	
	III	Core Course – VI (CC)	Indian Textiles, Embroidery & Costumes		5	5	3	25	75	100
		Second Allied Course - II	Wet Processing		5	4	3	40	60	100
		Second Allied Course - III	Wet Processing - Practicals		4	3	3	25	75	100
	IV	Non Major Elective II - for those who studied Tamil under Part I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Foreign Trade Techniques		2	2	3	25	75	100
IV	Skill Based Elective I			2	4	3	25	75	100	
		TOTAL		30	24				700	
V	III	Core Course – VII (CC)	Pattern Making Techniques		5	4	3	25	75	100
		Core Course – VIII (CC)	Pattern Making Techniques - Practicals		5	4	3	40	60	100
		Core Course – IX (CC)	Kid’s Apparel Designing		6	5	3	25	75	100
		Core Course – X (CC)	Kid’s Apparel Designing - Practicals		5	4	5	40	60	100
		Major based Elective – I	Fabric Care		5	5	3	25	75	100
	IV	Skill based Elective –II			2	4	3	25	75	100
		Skill based Elective – III			2	4	3	25	75	100
		TOTAL		30	30				700	
VI	III	Core Course – XI (CC)	Adult’s Apparel		6	5	3	25	75	100
		Core Course – XII (CC)	Adult’s Apparel - Practicals		6	5	5	25	75	100
		Core Course – XIII (CC)	Garment Manufacturing Technology		6	5	3	25	75	100
		Major based Elective II	Computer Aided Designing		6	5	3	25	75	100
		Major based Elective III	Computer Aided Designing - Practicals		5	4	3	25	75	100
V	Extension activities			-	1	-	-	-	-	
	Gender Studies			1	1	3	25	75	100	
		TOTAL		30	26				600	
		GRAND TOTAL		180	140				3800	

Internship for 10 days during summer vacation after the II year in Textile & Processing unit or Garment Manufacturing unit, prepare & submit the sample.

Note:

	Internal Marks	External Marks
1. Theory	25	75
2. Practical	40	60

3. Separate passing minimum is prescribed for Internal and External marks

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks]

The passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

* for those who studied Tamil upto +2 (Regular Stream)

** Syllabus for other Languages should be on par with Tamil at Degree level

those who studied Tamil upto 10th or +2, but opt for other languages in degree level under Part I should study special Tamil in Part IV

*** Examination at the end of the next semester.

Extension activities shall be out side the instruction hours.

கற்பிக்கும் கால அளவு

மோழிப் பாடங்கள் - 1 மதிப்பீடு = 2 மணிநேரம் கற்பித்தல் வகுப்பு
குலை மற்றும் அறிவியல் பாடங்கள் :1 மதிப்பீடு = 1 மணிநேரம் கற்பித்தல் வகுப்பு
[Lecture]
= 2 மணிநேரம் பயிற்சி வகுப்பு
[Tutorial]
= 2-3 மணிநேரம் செய்முறை வகுப்பு
[Practical]

SEMESTER I - 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, fashion journalism; Conferences, trade fairs & exhibition, Fashion show; window display. Important Fashion designers and their famous labels.

Unit III: Art Design & Colour

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

Unit IV: World Fashion trends

Centres of Fashion in the world, Emergence of Fashion Designers, Contribution of well known designers from France, America, Europe and India.

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. Suzanne G. Marshall, Hazel O. Jackson M. Sue Stanley, Mary Kefgen, Individuality in clothing Selection and Personal Appearance, Phyllis Touchie Specnt, New Jersey, 2000.
2. Kitty G. Dickerson, Inside the Fashion Business, Pearson Education, Singapore, 2003.
3. Kathryn Mokelvey, Janine Munslow, Fashion Design Process, Innovation And Practice, Black Well Science Ltd, U.K, 2005.
4. Dudeja, V.D. Professional Management of Fashion Industry, Gangandeeep Publications, New Delhi, 2005.

CORE COURSE II - FASHION SKETCHING (Practicals)

BASIC SKETCHING

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.

SKETCHING ON BASIC CROQUI

1. Sketching of
 - i) necklines and collars.
 - ii) sleeves and cuffs
 - iii) pockets and yokes
 - iv) children wear.
 - v) Sketching of pants and shirts
 - vi) skirts and tops
 - vii) belts and gloves
 - viii) bags and hats
 - ix) hosiery and neckwear
 - x) bows and shoes.

Reference:

Costume drawing by Patrick Taylor.

FIRST ALLIED COURSE I - FIBER TO FABRIC

Unit I - Yarn Manufacturing

Classification of fibres – Physical and Chemical properties of fibre and their end uses – Cotton, Wool, silk, Viscose Rayon, Nylon, Polyester, Objectives and process sequence – Blending-Mixing – Opening and cleaning – Carding – Doubling – Combing – Drawing – Roving – Spinning – Winding. Manufacturing process – Polyester, viscose rayon, nylon, Blends and mixtures

Unit II – Yarn Classification

Simple Yarn – Cable, Ply and double Fancy yarn – Slub, flake, Spiral, knot or spot yarn – Count and twist – Optimum twist

Unit III – Woven Fabric Classification

Basic weaves – plain, twill and satin and their variations, Fancy weaves – pile, double cloth, swivel, lappet, leno, dobby and jacquard.

Unit IV – Knitted Fabric Classification

Wept Knitting – plain – Rib – Purl – Single jersey – Double jersey, Terry Interlock
Warp knitting - Tricot – Raschel – Simplex and milanese

Unit V - Special Fabric construction Techniques

Crocheting, tatting, knotting, Non Wovens, felting, braiding, laminating bonding, netting and lace making.

References:

1. Corbman B.P Fibre to Fabric, International Students Edition Mc Graw Hill Book Co- Singapore, 2000.
2. J.L. Smith, Textile processing, Abhishek Publications, Chandigarh, 2003.
3. Gokarneshan U, Fabric Structure and Design, New age International Publishers 2004.
4. Kate Wells, Fabric Dyeing and Printing, Conran Octopus 2000.

Semester II
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: 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

Personal expression in 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: Selection of Clothing:

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 Planning

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

Reference:

1. Suzanne G. Marshall, Hazel O. Jackson M. Sue Stanley, Mary Kefgen, " Individuality in Clothing Selection and Personal Appearance" (2000) Phullis Touchie Specnt, New Jersey.
2. Josephin A.Foster,M.Janish Hogan, Bettie M.Herring, Andrey G. GieSeking, Williams," Creative Living"-Basic concepts in Home Economics, McGraw- Hill, New Jersey, 1994.
3. Dr. Sushma Gupta, Neeru Garg, Renu Saini, Text Book of Clothing, Textiles and Laundry –, Kalyani publishers, New Delhi, 2005.
4. Durga Duelkar, "Household textiles and laundry work" Atma Ram and Sons, New Delhi, 1988.
5. Suzanne G. Marshall, Hazel O. Jackson M. Sue Stanley, Mary Kefgen, Phullis Touchie Specnt, Individuality in clothing selection and Personal Appearance, New Jersey. 2000.

FIRST ALLIED COURSE II
TEXTILE TESTING AND QUALITY CONTROL

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

Unit III: - Yarn testing

Yarn testing: Determination of yarn count – quadrant & Beesley balance. Twist – Measurement 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 Testing: Fabric strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester.

Unit V: Drape

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. Sabville B.P. Physical Testing of Textils, The Textile Testing Institute, woove head Publishing Ltd., Cambridge,

FIRST ALLIED COURSE III

TEXTILE TESTING AND QUALITY CONTROL (Practical)

1. Determination of
 - i) fiber length and uniformity.
 - ii) fiber fineness
 - iii) fiber strength
 - iv) moisture content
 - v) Yarn count
 - vi) lea strength / single yarn strength and elongation
 - vii) yarn twist.
 - viii) Yarn crimp
 - ix) breaking and bursting strength
 - x) fabric abrasion resistance
 - xi) fabric drape
 - xii) fabric stiffness
 - xiii) fabric thickness

Reference:

Booth. J.E. Principles of Textile Testing, C.B.S. Publishers and distributors, New Delhi

Non Major Elective I – World Costumes

Unit 1: The Egyptian Costumes

Early costume ,Attire for Men, Women and children ,Jewellery and Accessories

Unit 2: The Grecian and Roman Costumes

Grecian Costumes: Chiton; Himation; Hair; Head:Dress; Ornaments; Colours; Foot wears; Toilette Accessories; Roman Costumes: Toga; Stola; Ornaments; Hair Styles; Footwear; Toilette Accessories

Unit 3: Costumes of Middle Ages: France

Gallo roman period: Costumes of Gallo roman period, Accessories of Gallo roman period; Merovingian period: Costumes of Merovingian period, Accessories of Merovingian period; Byzantine period: Costumes of Byzantine period, Accessories of Byzantine period; 11th Century: Costumes of 11th Century; 12th Century: Costumes of 12th Century; Accessories of 12th Century
Costumes of the Renaissance in France (1500) Costumes of French (1700); Accessories and hair styles of French (1700)

Unit4: American Costumes

Costumes of America (1781:1920) Costumes of America (1781:1900); Accessories of America (1781:1900); American Costumes (1900:1920): Costumes of America (1900:1920); Accessories of America (1900:1920) Costumes of America (1920:1940); Accessories of America (1920:1940); American Costumes (1940:1956): Costumes of America (1940:1956); Accessories of America (1940:1956)

Unit 5: Costumes of Asian Countries and Africa

Costumes of Pakistan; Costumes of Srilanka; Costumes of China; Costumes of Myanmar; Costumes of Thailand; Costumes of Japan Costumes of Gabon; Costume of Senegambia; Costume of Abyssinia; Costume of Sothern Africa; Costume of Timbuctoo; Costume of Berbers

References:

1. James Laver, Costume and Fashion and Cancise History Published by Thames & Hudson, London, 2002.
2. .John Gillow and Bryan World Textiles a visual guide to traditional techniquesBulzinch Press Book Little Brown and Sentence Company, London. 1999.
- 3.Manmeet Sodhia , History of Fashion,Kalyani Publishers, New Delhi, .2000

SEMESTER III - CORE COURSE IV (CC) - BASICS OF SEWING

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 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.

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

References:

1. Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
 - a. Zarakar K.R, System of Cutting, Navneet Publications India 2005
2. Hilary Campbell, ” Designing Patterns Om Book Services, New Delhi, 2003.
3. Helen Joseph-Pattern Making for Fashion Design, Armstrong Pearson Education, Delhi, 2000.
4. Mary Mulasi, Garments with style, Chiton Book Company, Pennsylvania, 1995.

SEMESTER III

CORE COURSE V – BASICS OF SEWING (Practicals)

1. Demonstrating- operating, cleaning and oiling of sewing machine.
2. Demonstration of taking body measurement.
3. Preparing samples for
 - i) seams and seam finishes
 - ii) darts and tucks
 - iii) flare, frills, ruffles & godets
 - iv) pleats and gathers.
 - v) Skirts and sleeves (any 5 page)
 - vi) Bias facing & binding
 - vii) Yokes and Pockets (any 2 type)
 - viii) Placket (any 2 type)

Reference:

1. Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and Tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
2. Zarapkar K.R, System of Cutting, Navneet Publications India 2005

SEMESTER III
SECOND ALLIED COURSE I (AC) - FASHION MERCHANDISING

Unit I

Fashion marketing – 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. Suzanne G. Marshall, Hazel O. Jackson M. Sue Stanley, Mary Kefgen, Individuality in clothing Selection and Personal Appearance, Phullis Touchie Specnt, New Jersey, 2000.
2. Kitty G. Dickerson, Inside the Fashion Business, Pearson Education, Singapore, 2003.
3. Kathryn Mokelvey, Janine Munslow, Fashion Design Process, Innovation And Practice, Black Well Science Ltd, U.K, 2005.
4. Dudeja V.D., Professional Management of Fashion Industry, Gangandeeep Publications, New Delhi, 2005.

SEMESTER IV

CORE COURSE VI– INDIAN TEXTILES, EMBROIDERY AND COSTUMES

Unit I: - Origin of Costumes

Theories of clothing origin, 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. Introduction - Traditional ornaments of India.

References:

1. James Laver, Costume and Fashion and Concise History Published by Thames & Hudson, London, 2002.
2. Dr. Parul Bhatnagar Traditional Indian and Textiles. Published by – Abhisek Publications – Chandigarh, 2004.
3. Jasleen Dhamija and Jyotindra Jain Hand wove Fabrics of India - Mapin Publishing Pvt.Ltd. Ahmedabad, 2002.

SEMESTER III
SECOND ALLIED COURSE II (AC) - WET PROCESSING

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 & Yarn dyeing

Fiber dyeing- Stock dyeing, Top dyeing

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

Unit IV: - Fabric

Fabric dyeing – Piece dyeing, Jigger dyeing, Beck dyeing, pad dyeing, Beam Dyeing, Jet dyeing, Vacuum impregnation, Foam dyeing, Solvent dyeing. Special dyeing effects – cross-dyeing, union dyeing, tone-on-tone effects.

Unit V: - Printing techniques:

Preparation of block, stencil, screens, rollers. – methods of printing using block, stencil, screens, rollers. Discharge printing, tie and dye and batik.

Reference:

1. Sara J. Radolph and Anna I. Langford, Textile, Prentice Hall, New Jersey, 2002.
2. C.W Pellow, Dyes and dyeing , Abhishek Publications, 2000.
3. Z.J. Grosicki ,Watson's design and Colour- Elementary Weaves and Figured Fabrics. Wood head Publishing Limited, 2004.

SECOND ALLIED COURSE (AC) - WET PROCESSING (PRACTICALS)

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 Disperse dye.
10. Printing using Block, Batik, Screen+

Reference:

1. Bernard. P. Corbman, Textiles – Fiber to fabric, Mc. Graw. – Hill book Company, 2000

Non Major Elective II – Foreign Trade Techniques

Unit 1: Introduction to Indian Apparel Industry

Scenario of Indian Apparel Industry; Nature and Size of the Industry; Export and Import; Quota System and Its Phase Out

Unit 2: Trade History and Trade Law

Introduction to WTO; Measuring Protectionism: Tariff around the World; US Trade Policy; Customs Duties in Government Revenue: UK, France and Brazil; US Tariff Policy; Import Tariffs effects in Large Countries – Price and Welfare effects, Import Tariffs in Small Countries – Price and Welfare effects; History of Import Quotas – Import quotas effects in Large countries – Price and Welfare Effects; Import Quotas effects in small countries – Price and Welfare Effects

Unit3 : Export Business

Essential Steps in Exporting in Apparel Industry; Formalities for Starting Export Business; Export Marketing; International Marketing Environment; Basic concepts of foreign exchange; Export Policy and Licensing Procedures

Unit 4: Export Import Procedure and Documentation

Basic documents used in international trade: export letter of credit, processing of an export order, excise duty and sales tax procedure, pre-shipment documentation, standardization procedure for export by sea, inland container depots, container freight stations, export by air, courier service, land and river; Methods of International Payment Settlement; Collection; Retirement of import documents, Customs procedure for clearing of imported goods

Unit5: Export-Import Finance

Export finance and payments: export credit, financing foreign receivables advances against collections, discounting trade acceptance; institutional support for export finance in India, RBI .ECGC .FEDAI.; Stages of export finance: types of pre-shipment and post-shipment finance; New schemes of export financing, rediscounting of export bills; options for the exporters; forfeiting and factoring; Import finance; Import letter of credit-exchange control requirements

Reference:

1. Dickerson, Textiles & Apparel, in the Global economy, Prentice Hall, 3rd ed, 1998.
2. Darlie Koshy, Effective export marketing of Apparel, Global business press, 1996.

SEMESTER V
CORE COURSE VII (CC) - PATTERN MAKING TECHNIQUES

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.

References:

1. Amaden Gewford, Fairchild Fashion Draping, Connje publication, Inc 2005.
2. Hilary Campbell, Designing Patterns, Om Book services, New Delhi, 2003.
3. Helen Joseph-Pattern Making for Fashion Design, Armstrong Pearson Education, Delhi, 2000.
4. Sandra Betzina, Fast Fit, the Taunton press, Inc New York London, 2003.

CORE COURSE VIII (CC) - PATTERN MAKING TECHNIQUES (PRACTICALS)

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.

Reference:

1. Practice clothing construction by Mary Mathews.

CORE COURSE IX (CC) - KID'S APPAREL DESIGNING

Unit I – Infant wear:

Baby layerre – Bib, Jabla, Panty, Materials used, designs, Colour, Texture.

Unit II: Pre Schoolers wear

Aline frock, Romper, Yoke frock, Sunsuit

Materials used designs colour, Texture,

Unit III: Grade School Girls Wear

Midi & Midi Top, Different Types of Skirts & Top materials used, design, colour, Texture.

Features to be incorporated

Unit IV: Grade School Boy wear:

Yokeless shirt, Elastic shorts (without Ply opening) Materials used, design, colour, Texture,

Features to be incorporated.

Unit V: Kids Party Wear

Ghagra – Choli, Kurta Pyjama

Materials used, design, Colour, Texture, Features to be incorporated.

Reference:

1. Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and
2. Tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
3. Zarpkar K.R, System of Cutting, Navneet Publications India 2005

CORE COURSE X (CC) - KIDS APPAREL DESIGNING (P)

1. Designing and constructing of any one types of baby
 - i) layette/baby bed.
 - ii) jabla or any infants garments
 - iii) bib, bonnet and panty.
 - iv) romper.
 - v) A-line frock
 - vi) summer frock
 - vii) yoke frock.
 - viii) Fashionable wear for kids

Reference:

4. Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and
5. Tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
Zarapkar K.R, System of Cutting, Navneet Publications India 2005

MAJOR BASED ELECTIVE I – FABRIC 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 linen 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.

Semester-VI
CORE COURSE – XI – ADULT'S APPAREL

Unit I : Women's Formal wear

Salwar – Kameez Churidar, Womens Top and Pant (Material used, designs, Colour, Texture, Features to be incorporated)

Unit II : Women's informal wear

Saree, Petticoat, Night dress

Unit III : Men's formal wear :

Shirt with yoke, Full sleeve & Cuff, pant with pleats, back pockets, fly opening

Unit IV : Men 's Party wear

Sherwant, Double – Breasted Coat

Unit V : Women's Party wear

Saree House, Ghagra – Choli, Maxi

Reference :

- 1 .Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and Tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
2. Zarapkar K.R, System of Cutting, Navneet Publications India 2005

CORE COURSE XII - ADULTS GARMENT PRACTICALS

1. Designing and constructing any one type of
 - i) sari petticoat and blouse.
 - ii) salwar kameez
 - iii) shirt and pant.
 - iv) Partywear or fashionable wear for women
 - v) Partywear or fashionable wear for men

Reference:

- 1 .Mary Mathews, Practical Clothing Construction Part-II. Designing, Drafting and Tailoring Bhattarams Reprographics (P) Ltd., Chennai, 1991.
2. Zarapkar K.R, System of Cutting, Navneet Publications India 2005

CORE COURSE XIII

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: 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.

MAJOR BASED ELECTIVE II - 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 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 silhouette. 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.

Major Based Elective III
COMPUTER AIDED DESIGNING (PRACTICALS)

1. Developing motifs using coral draw and adobe Photoshop.
2. Developing weave patterns for dobby 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, and Pockets)
8. Developing garment designs for children's garment with colour combination
9. Developing garment designs for men's garment with colour combination
10. Developing garment designs for women's 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)
