**BANGALORE UNIVERSITY**

# B.Sc. Fashion & Apparel Design (CBCS) Syllabus

(I to VI Semesters)

2014-15 onwards

DEPT. OF APPAREL TECHNOLOGY & MANAGEMENT

CENTRAL COLLEGE CAMPUS,

BANGALORE 560001

## B.Sc.- FASHION AND APPAREL DESIGN(CBCS)

### SEMESTER I

| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
|---|---|---|---|---|---|---|---|---|
| | | | | | IA | Exam | Total | |
| | Language I | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| | Language II | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| FAD103 A FAD 103 B | Fibre& Yarn Science | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD104 A FAD104 B | Elements of Fashion & Design | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD105 A FAD105 B | Pattern Making & Garment Construction- I | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| | Constitution of India and Human Rights | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | CC&EC | - | - | - | 50 | - | 50 | 1 |
| | | | | **Total** | **800** | | | **16** |

### SEMESTER II

| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
|---|---|---|---|---|---|---|---|---|
| | | | | | IA | Exam | Total | |
| | Language I | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| | Language II | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| FAD203A FAD203B | Fabric Science & Analysis | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD204A FAD204B | Fashion Illustration & Design | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD205A FAD205B | Pattern Making & Garment Construction- II | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| | Environment and Public Health | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | CC&EC | - | - | - | 50 | - | 50 | 1 |
| | | | | **Total** | **800** | | | **16** |

| SEMESTER III | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
| | | | | | IA | Exam | Total | |
| | Language I | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| | Language II | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| FAD303A FAD303B | Textile Wet Processing | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD304A FAD304B | Fashion Art and Design | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD305A FAD305B | Pattern Making & Garment Construction- III | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| | Computer Applications and Information Technology | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | CC&EC | - | - | - | 50 | - | 50 | 1 |
| | | | | **Total** | **800** | | | **16** |

| SEMESTER IV | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
| | | | | | IA | Exam | Total | |
| | Language I | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| | Language II | Theory | 4 | 3 | 30 | 70 | 100 | 2 |
| FAD403A FAD403B | History of Textiles & Costumes | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD404A FAD404B | Textile & Apparel Testing | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD405A FAD405B | Apparel Production | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| | Communication skills | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | CC&EC | - | - | - | 50 | - | 50 | 1 |
| | | | | **Total** | **800** | | | **16** |

| SEMESTER V | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
| | | | | | IA | Exam | Total | |
| FAD501A | Fashion Retail, Marketing & Merchandising | Theory | 4 | 3 | 50 | 100 | 150 | 3 |
| FAD502A | Apparel Computer Aided Design- I | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD502B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD503A | Fashion Accessories | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD503B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD504A | Draping | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD504B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD505A | Needle Craft | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD505B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD 506 | Internship Training/craft documentation* | - | 6 | Report Evaluation | 50 | 100 | 150 | 3 |
| | Life Skills & Personality Development | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | | | **Total** | **1000** | | | **20** |

*The student shall undergo 30 day craft document programme after approval from the institute during the semester holidays between 4th and 5th semesters.

| SEMESTER VI | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CODE | Subjects | Paper Theory/ Practical | Instruction Hrs/week | Duration of Exam (Hrs) | Marks | | | CREDIT |
| | | | | | IA | Exam | Total | |
| FAD601A | Entrepreneurship Development | Theory | 4 | 3 | 50 | 100 | 150 | 3 |
| FAD602A | Apparel Computer Aided Design- II | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD602B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD603A | Garment Surface Ornamentation | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD603B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD604A | Apparel Total Quality Management | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD604B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD605A | Clothing culture & communication | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD605B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| FAD606A | Fashion Portfolio & Design Collection | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| FAD606B | | Practical | 3 | 3 | 15 | 35 | 50 | 1 |
| | Indian History, Culture and Diversity | Theory | 3 | 3 | 30 | 70 | 100 | 2 |
| | | | | **Total** | **1000** | | | **20** |

A stands for theory & B stands for practical

**I Semester**
**B.Sc. (Fashion & Apparel Design)**
**FIBRE & YARN SCIENCE**

**FAD103A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

- To impart the knowledge of fibres, sources, their identification and properties
- To provide students with the knowledge of yarn science and their properties

**Unit 1** **4hrs**
Introduction to textile fibers-Definition, Sources, Classification and properties of textile fibres

**Unit 2** **6hrs**
Cellulose fibers-Cotton, flax, kapok, hemp, ramie- Properties and end uses, Protein fibers-Silk, Wool – Properties and end uses

**Unit 3** **6hrs**
Regenerated cellulose fibers- Viscose Rayon, Acetate Rayon, Tencel, Modal, Bamboo, Lyocel – production source, properties and end uses

**Unit 4** **6hrs**
Synthetic fibers-Nylon, polyester, acrylic and modacrylic- properties and end uses, Polyethylene, polypropylene, olefin, Elastomeric fibers (spandex and lycra)- End uses.

**Unit 5** **10hrs**
Yarn manufacturing process for short staple fibers, Spinning Process:- Ring and open end yarn spinning. Flowchart for manufacturing carded, combed yarn and folded yarn, Difference between Rotor, Ring spinning and Air jet spinning

**Unit 6** **8 hrs**
Polymers - Polymerization, degree of Polymerization, different types of polymers- addition and condensation, orientation and crystallinity, characteristics of fiber forming polymers, general physical and chemical properties of fibers.

**Unit 7** **6 hrs**
Texturisation - types (simplex and complex yarns) and uses, Blends- types, uses of blended yarns.

**Unit 8** **2 hrs**
Sewing threads- types and properties, fancy yarns-types and uses.

**References**


1. Gohl, E.P.G. Velensky, L.D, "Textile Science" CBS Publishers and Distributors, 2003
2. Hall, A.J. "The standard hand book of Textiles", Wood head Publishing 8th edition, 2004
3. Vidyasagar, P.V. "Hand Book of Textiles", A. Mittal Publications, 2005
4. Sara J. Kadolph, "Textiles", Prentice Hall, 10th edition 2007

5. Gordon Cook, J "Hand Book of Textile Fibres", Vol- II Man Made Fibers, Wood Head Publishing.
6. Bernard P. Corbman, "Textiles Fiber to Fabric" McGrawhill Publications, 6th, Edition 1983
7. Gilbert R. Merrill, "Cotton Opening and Picking" Universal Publishing Corporation, 1999
8. Gilbert R. Merrill, "Cotton Combing" Universal Publishing Corporation, 1999

**I Semester**
**B.Sc. (Fashion & Apparel Design)**
**FIBRE & YARN SCIENCEPracticals**

**FAD103B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment-15**

**Unit 1** **6**
Identification of different types of fibres by physical & chemical methods- cotton, Viscose, Silk, Wool, polyester, Nylon fibres

**Unit 2** **6**
Geometrical properties of yarn – Twist, Count of the yarns using different yarn numbering system

**Unit 3** **2**
Identification of yarns by physical method– spun & filament yarns, ply & novelty yarns

**Unit 4** **2**
Identification of varieties in Sewing threads &study of their properties like count, structure and twist.

**I Semester**
**B.Sc. (Fashion & Apparel Design)**
**ELEMENTS OF FASHION & DESIGN**

**FAD104A**
**Total Hrs: 48** **Exam Hours: 3**

**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To introduce students to elements and principles of design
- To impart knowledge on fashion art and its importance

**Unit 1** **6 hrs**

Art Media and Application – pencils, colour pencils, oil pastels, water colour, poster colours, acrylic colours, fabric colours, markers, collage, frottage, montage.

**Unit 2** **8 Hrs**

Elements of Fashion process: Fashion origin, evolution- with examples from different eras till French revolution, Fashion cycles, Fashion theories and terminologies

**Unit 3** **4 hrs**

Basic sketching techniques and sketching from life, Perspective and its uses, Grid technique of rendering

**Unit 4** **4 hrs**

Introduction to Anatomy, study of bone and muscular structure, proportions of males, females and children. Study of face, torso, legs and arms

**Unit 5** **12hrs**

Elements of Design (point, line, form, shape, space, size, texture and colour), Principles of Design – ( harmony, proportion, balance, rhythm and emphasis) Colour Theory (Prang, Munsellcolour system, Pantone Colours, colour wheel, colour value scale, grey scale, colour schemes, colour psychology, colour and emotions, Indian approach to colour),.

**Unit 6** **10 Hrs**

Elements of Fashion illustration: Introduction to Fashion illustration-History, importance, artists and illustrators of national and international repute.

**Unit 7** **4 hrs**

Introduction to Fashion Art, Proportion and the Fashion Figure- 8 head, 10 head, 12 head theory of fashion drawing

**References:**


1. Bride M Whelan, " Colour Harmony'" Rockfort Publishers, 1992
2. Chijiwa, Hideaki, " Colour Harmony", Rockfort publishers, USA, 10111 edition, I 1992
3. Piper, David, “The Joy of Art”, – Mitchell Beazley Publishers, 1984.
4. Gold Stein and Gold Stein, "Art in everyday life", Calcutta- IBH Publishing Co., 1972
5. Stanyer, Peter, “The Complete Book of Drawing Techniques” – Arcturus Publishing Limited for Book Mart Limited 2003.
6. Stockton and James, " Designers Guide to Colour", Chronicle Books, San Francisco, 1984

7. Tate Sharon Lee, "Inside Fashion Design", Francisco Canfield Press, 1977
8. Tomory, Edith, "A History of Fine Arts in India and the West" – Orient Longman Publishers Reprinted 1999.

**I Semester**
**B.Sc. (Fashion & Apparel Design)**

## ELEMENTS OF FASHION & DESIGN

**Practicals**
**FAD104B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **3**
Introduction to art media and its applications, Line Sketching and Painting techniques**,** Object Drawing, Simple rendering of art materials using pencil and colour pencils**,** Still life of simple objects and fabrics draped at a distance using wet media**,** Nature sketch of flowers and leaves using pastels and charcoal**,** Landscape painting using mix media, Perspective drawing – 1pt, 2pt, 3pt.

**Unit 2** **3**
Elements of design: Point, Line, Shape, Space, Color and texture. Principles of design- proportion, balance, rhythm, Emphasis and harmony.

**Unit 3** **4**
Colour Schemes and Free hand drawing and Design**,** Grey scale, colour value scale (10 values)**,** Colour wheel**,** colour scheme- primary, secondary, tertiary, color scheme monochromatic, achromatic, complementary, double split ,analogues using natural/geometric/ abstract/ stylized/conventionalmotifs**,** Tints, Shades, cool & warm colour.

**Unit 4** **3**
Fashion Illustration basics, Simple blocking and fleshing of the Fashion figure. 8 head, 10 head, 12 head figures in simple standing poses.

**Unit 5** **3**
Fabric rendering: Learning to simulate textures of various fabrics- Cotton, silk, fur, denim, print, georgette, chiffon, knitted, crochet, lace, embroidered.

**I Semester**
**B.Sc. (Fashion & Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION- I**

**FAD105A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To impart skills in basic techniques of pattern making
- To provide the knowledge of different machines used for sewing

**Unit 1** **14hrs**

Introduction to pattern making & Garment construction, History of sewing machine.Introduction to sewing machine: Domestic sewing machine, Industrial sewing machine, difference between Domestic & Industrial sewing machine, parts of a sewing machine, Varieties of industrial sewing machines- Single needle machine, double needle machine-lock stitch & chain stitch machines over-lock machine, sewing machine needles- types, parts & functions, care and maintenance of sewing machine ,sewing threads- function, performance, characteristics.

**Unit 2** **6 hrs**

Introduction to Tools for pattern making and Garment construction- Measuring tools, marking tools, Cutting tools, sewing tools, Pressing tools, different GSM paper & its uses.

**Unit 3** **12hrs**

Introduction to Basic hand Stitches : Application of Temporary and permanent stitches, Methods, importance and applications of basting, running, tacking, hand overcast, button hole, hemming stitches- plain & blind hemming, Stitches & Seams: Definition, terminologies, Specification ASTM standards, stitch properties, stitch classes, stitch types Seams: Definition, terminologies, seam Dimensions, seam classes, super imposed, Lapped, bound, Flat .

**Unit 4** **6 hrs**

Pattern making terminologies & symbols (notches, punch/circles,) Pattern information (grain, part, piece, cut symbols) seam allowance, fabric terms (grain, Bowing)

**Unit 5** **6 hrs**

Figure types & figure analysis (leg types, arm types, shoulders, abdomen, bust back relationship, waist hip relationship and stance). Body & garment relationship, Standardization, importance of body measurements

**Unit 6** **4 hrs**

Introduction to basic pattern- commercial and custom made patterns

**References**


1. Bane Allyne, Flat pattern design, McGrawHil1 pub... USA
2. Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
3. Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub., USA, 1994
4. Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall
5. Patric Taylor et.al., Grading for the fashion industry, StanelyThomes ltd., 1990
6. Winfred Aldrich.. Metric Pattern Cutting.. Blackwell Science, UK press, 1980

**I Semester**
**B.Sc. (Fashion & Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION- I**

**Practicals**
**FAD105 B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit - 1** **2**
Sewing machine- different kinds-functions-uses-attachment-practice on paper, stitching on fabric (straight, curves, corners and circular)

**Unit 2** **3**
Sketching the Basic sewing machine and parts, threading the Single needle machine, loading bobbin and bobbin case, fixing and removing the needle, care and maintenance of sewing machines, oiling.

**Unit 3** **2**
Sewing techniques - Basic hand stitches- basting, running, tacking, hand overcast, buttonhole, hemming stitches - plain & blind hemming, slip stitch, tailor's tack

**Unit 4** **2**
Seam & seam finishes- Plain, flat fell, French, turned & stitched, lapped, double top, pinked, over lock, & pinked and stitched

**Unit 5** **2**
Working of over lock machine and double needle lock stitch machine

**Unit 6** **2**
Pattern preparation for women's basic blocks front, back, sleeve & skirt

**Unit 7** **3**
Preparation of muslin basic blocks, test fitting, front, back, sleeve and skirt, pattern alterations

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**FABRIC SCIENCE & ANALYSIS**

**FAD203A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To impart knowledge on woven fabrics
- To help students understand fabric formation process

**Unit 1** **2 hrs**
Introduction on different methods of fabric formation- woven, knitted and nonwoven fabrics, Properties and end uses

**Unit 2** **12hrs**
Woven Fabric formation – weaving preparatory, objectives and brief study of process- winding, warping, sizing, Drawing and denting, Weft winding, Introduction to Khadi, Hand loom and power loom Fabrics. Classification of looms, Passage of material through loom, study of primary and secondary motions, Principle of Shuttleless loom Viz Multiple gripper, Rapier, Airjet, Waterjet looms. Advantages of unconventional looms over conventional looms

**Unit 3** **6 Hrs**
General Characteristics of woven fabrics and their importance– count of yarn, fabric grain, Thread density, Fabric width, Fabric weight and selvedges.

**Unit 4** **12hrs**
Elementary weaves – Classification of woven fabrics. glossary and characteristics, construction, salient features- of Plain weave – variation (rib and Basket), Twill weave – variation (RHT, LHT, Pointed and Herringbone) and Satin / Sateen weave – variation. Fabric Design and graphical representation of the above weaves. Introduction and salient features of Crepe fabrics like georgette, chiffons, Extra threads, Warp and weft pile and Brocade and damask, Terry pile structures.

**Unit 5** **8 hrs**
Introduction to Knitting – Classification, difference between warp and weft knitting, Basics of weft knitting, Loop diagram and properties of basic weft knitted structures, Modification of weft knitted structures.

**Unit 6** **8 hrs**
Brief discussions of important fabric manufacturing clusters in India and their salient features- Kancheepuram, Arni, Kumbakonam, Chanderi, Maheshwari, Salem and Karur, Bangalore, Mysore, Illkal, Guledgudda, Kota, Banaras, Suhalkuchi, santhipur, Beharampur of Orissa, Pochampalli and panipat.

**Reference:**


1. Corbmann, B.P Textiles : Fibre to fabric' Mcgraw Hill Inc. Singapore 1986
2. Grosicki, Z.J. "Watson's Textile Design &Colour", 7th edition, Wood head Publication.
3. Murphy, W.S. "Handbook of weaving" Abhishek publication.
4. Murphy, W.S. "Textile weaving & Design" Abhishek publication, 2003.

5. Pizzuto, J.J "Fabric Science" 6th edition, Fairchild publications.
6. Spencer D.J. 'Knitting Technology' Pergamon Press, Oxford 1982

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**FABRIC SCIENCE & ANALYSIS**

**Practicals**
**FAD203B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **14**

Analysis of different fabrics for clothing construction and weaves like Plain, twill, Sateen, satin honeycomb, herringbone and mock leno etc. and finding the particulars like fabric geometrical parameters and cover factor.

**Unit 2** **2**

Collection and portfolio preparation of 25 different commercial samples with different weaves and weight for apparels, furnishing, House hold application, support material for garments and trims

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**FASHION ILLUSTRATION& DESIGN**

**FAD204A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- Introduction to fashion illustration and its role in fashion design
- Basics of clothing origins

**Unit 1** **4 hrs**

Introduction to fashion Illustration and brief history of fashion illustration, Study of two well known Fashion Illustrators.

**Unit 2** **8hrs**

Fashion Figure, study of various proportions, The balance line in drawing figures, gestures and movements. 8 head,10 head, 12 head figures, the fashion face, arms, legs, Hands and feet. Illustrating male figure and children, Figure analysis, body types, designing for diverse body types and ages

**Unit 3** **8hrs**

Fashion terminologies – fashion, fad, cycle, style, classics, boutique, trend, haute couture, designer, prêt a porter, silhouette, croquis, taste, Fashion icon, fashion follower, muse

**Unit 4** **7hrs**

Origins of fashion and clothing theories, Clothing as modesty, protection, status and religious symbol, Fashion as status symbol, the major fashion centers and Fashion theories

**Unit 5** **6hrs**

Garment Features –types of silhouettes, collars, yoke variations, pockets, cuffs, sleeves Trousers, Fashion silhouettes - types of silhouettes, blouses formal, casual, and shirts – men and women. Skirts flared, pencil, circular, trousers, collars, cuts, yokes, pockets, cuffs as seen in illustration

**Unit 6** **8hrs**

Fashion Psychology, role of clothing in physical, social, psychological and cultural scenario, Human behaviour and clothing, Clothing and gender differentiation

**Unit 7** **7 hrs**

Fashion designers, history and look into design concepts of famous designers, both Indian and International.

**References:**


1. Allen and Seaman, "Fashion drawing- The Basic Principles", B. T Batsford, London, 1994
2. Drake andIreland, Patrick *John,* "Fashion Design Drawing and Presentation", B. T, Batsford, London, 1996
3. Nicholas, "Fashion illustrations", Thames and Hudson. London, J 994
4. Seamn, Julian, "Professional Fashion Illustration". B. T. Batsford, London, 1995

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**FASHION ILLUSTRATION & DESIGN**

**Practicals**
**FAD204B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **2**
Fashion illustrations – 8 head, 10 head, 12 head figures standing, moving and Drawing male, female and children figures, Model drawing.

**Unit 2** **4**
Fashion figure details and stylization of various parts, including the fashion face, torso, limbs and features using various media

**Unit 3** **2**
Garment Features –types of collars, cuts, yokes, pockets, cuffs, sleeves (5 each)

**Unit 4** **2**
Drawing of fashion silhouettes - Types of silhouettes, blouses, shirts. Skirts, trousers, dress

**Unit 5** **2**
Foreshortening of figures, grouping of figures. – Thematic figure composition

**Unit 6** **4**
Preparation of portfolio of five designs each inspired by one Indian and one international designer

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION - II**

**FAD205A**

**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To introduce the concept of garment making.
- To impart knowledge and skills required for garment components.

**Unit 1** **4hrs**
Fullness- Darts, pleats, tucks, gathers, Sleeves- Definition, terms, classification, types-basic sleeve, gathered, bell, kimono, raglan, leg of mutton & construction

**Unit 2** **6hrs**
Dart Manipulation- conversion of darts to tucks, pleats, gathers, seamlines etc.

**Unit 3** **6hrs**
Collars - Definition, terms, classification, and types –Peter pan, sailor, Turtle collar, shawl, formal shirt collar, Mandarin, collar with stand & its variations& construction

**Unit 4** **4hrs**
Yokes-Definitions, purpose, types-with fullness & without fullness, Shapes &construction

**Unit 5** **4hrs**
Pockets- Definitions, purpose, Patch pockets, Patch pockets with flap, Seam pockets, welt pockets& variations

**Unit 6** **4hrs**
Neck line Finishes- piping, facing (bias facing, shaped facing).

**Unit 7** **6hrs**
Plackets- definition, types Self, front placket, continues bound placket, two piece sleeve placket and shirt placket

**Unit 8** **6hrs**
Skirts – Basic-flared, circular, gathered, pleated, basic waist band application

**Unit 9** **4hrs**
Dress categories: with waistline without waist line, silhouettes, torso dress, princes, panel & drafting

**Unit 10** **2 hrs**
Sleeves – definition, terminologies, types- Sleeves along with bodice and set in sleeves.

**Unit -11** **2 hrs**
Fasteners- press buttons, hook & eye, shirt button, button holes, concealed zippers & zips

**References:**

1. Helen J. Armstrong, “Pattern making for fashion design” Prentice Hall
2. Winfred Aldrich, “Metric Pattern Cutting”, Black Well Science, UK

**II Semester**
**B.Sc. (Fashion & Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION – II**

**Practicals**
**FAD205B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** 2
Fullness – gathers, pleats, ruffles, tucks, godets etc.

**Unit 2** 2
Dart Manipulation- conversion of darts to tucks, pleats, gathers, seamlines etc.

**Unit 3** 2
Sleeves- plain, gathered, raglan, kimono

**Unit 4** 2
Collars- peter pan, turtle neck, Chinese, shawl, shirt

**Unit 5** 2
Yokes-With and without fullness style lines

**Unit 6** 2
Pockets-Patch pockets, Patch pockets with flap, Seam pockets.

**Unit 7** 2
Finishes- neckline finishes- facing, shaped facing and piping/binding.

**Unit 8** 2
Plackets and finishing- continuous/ one piece, bound/ two piece placket
Zippers- applications lapped zip, centered zip, concealed zip, fly zip

**III Semester**
**B.Sc. (Fashion and Apparel Design)**
**TEXTILE WET PROCESSING**

**FAD303A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To impart knowledge of textile and garment wet processing
- To introduce students to various chemicals, dyes and auxiliaries used for chemical processing

**Unit 1** **6 hrs**

Introduction to wet processing, sequence of wet processing operations for cotton, silk and wool, Brief discussion on Equipments and machineries used for wet processing.

**Unit 2** **8 hrs**

Preparatory processes: Cotton yarn and fabrics-Different methods and process parameters used for singeing, Desizing, scouring, bleaching and mercerization, Silk Yarn and Fabrics - Degumming, Bleaching**,** Wool: Scouring, Carbonization and Bleaching, Brief discussion on preparatory process used for Polyester blends and polyester fabrics.

**Unit3** **8hrs**

Dyeing- Introduction, classification, Methods of dyeing: stock, yarn, piece and union, application of direct, basic, acid, vat, reactive and disperse dyes for cotton, silk and wool yarn and polyester fabrics.

**Unit 4** **8 hrs**

Printing methods - Block, screen, Transfer and Digital printing, Styles of printing– Direct, resist, discharge and transfer, after treatments for dyed and printed goods washing, steaming and drying.

**Unit 5** **8 hrs**

Finishes- definition, types- Temporary and permanent Finishes, Basic/routine—Tentering, Decatising, sanforising, calendaring, Functional/ special-waterproof and water repellent, Wrinkle free, antimicrobial, Flame retardant and other special finishes.

**Unit 6** **4hrs**

Garment processing and finishing: Importance of garment dyeing and finishing, Special finishes used for denims.

**Unit 7** **6 hrs**

Care of fabrics – Principles of laundering, stain removal, various solvents used and different methods of washing, soaps and detergents used during washing.

**References**


1. Hall A J ‘The standard Hand Book of Textiles’ Woodhead Publication, 2004
2. Janice gunner ‘Shibori for textile Artist’ Batsford London, 2006
3. Kate Broughton textiles Dyeing , Rockport publishers, 1996
4. Murphy, W.S ‘ Textile Finishing’ Abhishek Publication, 2000
5. Rosi Robinson ‘Creative Batik’ Search Press,2004
6. Smith J E ‘Textile Processing’ – Printing ,Dyeing, Abhishek Publishing,2003

**III Semester**
**B.Sc. (Fashion & Apparel Design)**
**TEXTILE WET PROCESSING**

**Practicals**
**FAD303B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **2**
Scouring, Bleaching and Mercerization of Cotton yarn/Fabric

**Unit 2** **2**
Degumming and Bleaching of silk yarns

**Unit 3** **4**
Dyeing of cotton yarn/Fabric by Direct, reactive, Vat dyes

**Unit 4** **3**
Dyeing of silk yarn/ Fabric by acid and reactive dyes.

**Unit 5** **1**
Dyeing of polyester yarn/fabric using Disperse dyes

**Unit 6** **2**
Printing of fabric using screen and Block using pigment, reactive and direct dyes

**Unit 7** **1**
Tie and dye of cotton or silk fabric using reactive colors

**Unit 8** **1**
Batik printing of cotton and silk fabric

**III Semester**
**B.Sc. (Fashion & Apparel Design)**
**FASHION ART AND DESIGN**

**FAD303A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To help students to understand the fundamental and principles of figure design
- To understand different illustration technique and dynamic figure sketching

**Unit1** **6hrs**
Design – Types, design development, motif, pattern and layout, design manipulation, inspiration from nature and history. Types of motifs from India, China, Japan , Persia- traditional ,stylized, geometric, abstract.

**Unit2** **6hrs**
Fashion design – Definition, Fashion categories based on age and activity – Types- casual, formal, sports and ethnic.

**Unit3** **8hrs**
Flat sketch and spec- Its importance and application, design sketching, ways of layout, flats for men, women and children's wear.

**Unit4** **6hrs**
Designing of dress based on figure types- colour combination, various garment to create optical illusion.

**Unit5** **8hrs**
Clothing and personality, Clothing and attitude, Clothing and motivation, Grooming.

**Unit6** **6hrs**
A detail study on one Indian and International designer – concept, design, creation and collection of Gianni Versace, coco chanel, Balenciaga, Stella McCartney, Anita Dongre, RituKumar, RituBeri , Wendell Rodricks, Raghavendra Rathod, Sabyasachi Mukherjee.

**Unit7** **8hrs**
Study of advanced illustrative Techniques and three dimensional views.

**References**


1. Bush. G, " Psychology of clothing", London 1990
2. Ireland, " Fashion Design illustration- Children", B. T. Batsford, London, 1996
3. John Wiley, "Theory. of Fashion Design" John Wiley and sons. Inc, New York, 1990
4. Lauzzana and Raymond, "International Director Of Design", Peurose, USA, 3rd edition, 1995
5. Patrick John Ireland, " Fashion Design i/lustration- Men", B. T. Batsford, London, 1996
6. Patrick John Ireland, " Fashion Design illustration- Women", B. T. Batsford, London, 1996 Patrick John
7. Peacock J, " Fashion Source Books", Thames and Hudson, London, 1997/98
8. Stecker P, " The Fashion Design manual" Macmillan, Australia, 1997

**III Semester**
**B.Sc. (Fashion & Apparel Design)**
**FASHION ART AND DESIGN**

**Practicals**
**FAD303B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit: 1** **3**
Design development – motif, design, pattern and repeats, full, 1/4$^{th}$, ½, 3/4$^{th}$ drop, brick, mirror, ogee, geometrical forms- concentric, corner, circular, and cylindrical.

**Unit: 2** **4**
Body figures and features- Face- eyes, nose, lips, ears, arms and legs , Hair styling- women's, men, different hair coloring, retro, punk, hip hop, hippe, traditional and bridal.

**Unit: 3** **3**
Figure drawing – Fashion figure, stylized figure of 10 and 12 head for different figure postures.

**Unit: 4** **4**
Fabric rendering – Fashion rendering on croquis- woven-cotton, denim, lace, net, corduroy, printed- natural, abstract, stylized, knits- pearl, rib and cable.

**Unit: 5** **3**
Fashion sketching of advanced illustration techniques and 3 dimensional views. (only hand)
Development of Research Boards on inspiration, mood, colour and texture.

**III Semester**
**B.Sc. (Fashion and Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION - III**

**FAD305A**

**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objective:**

- To familiarize students with clothing construction for different sizes &categories

**Unit 1** **6hrs**

Definition layout, importance, principles, types of layout, importance of fabric estimation, advantages, methods of estimating material requirement for garment- easy method & formula method of estimation.

**Unit 2** **3hrs**

Introduction to manual and computerized pattern development, mini marker. Softwares used for pattern development. Introduction to Digitizer plotter and scanner.

**Unit 3** **3hrs**

Handling special fabric-factors for consideration while making patterns & garment construction using special fabrics-stretch fabrics, knit, checks, plaids, velvet, leather, fur &lace.

**Unit 4** **6hrs**

Interlining- interfacing- materials, types, properties, applications& machinery

**Unit 5** **6hrs**

Bifurcated garments: Introduction of culottes, trouser & its variations

**Unit 6** **6hrs**

Foundation garments- Introduction, materials used & types of fitting for men's innerwear briefs& trunk., swimwear Women's innerwear brassier , panties and swim wear.

**Unit 7** **6hrs**

Fitting- principles of fitting, standards for a good fit, e-fitting, body scanner, 3D simulators.

**Unit 8** **6hrs**

Pattern alteration techniques- pivot, slash & seam method-length- width- front-back-sleeve shirt-Skirt-trousers

**Unit 9** **6hrs**

Grading- definition, sizes, principles, types, grading points, & importance of manual and computerized grading and software's used for grading.

**References:**


1. Helen J Armstrong, Pattern making for Fashion Draping, 2009
2. Patric Taylor et.al., Grading for the Fashion Industry, Stanley Thomas Ltd., 1990
3. Winfred Aldrich, Metric Pattern Cutting, Blackwell Science, UK.1988

**III Semester**
**B.Sc. (Fashion & Apparel Design)**
**PATTERN MAKING & GARMENT CONSTRUCTION - III**

**Practicals**
**FAD305B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **4**
Designing & construction of garments with style features using drafting, flat pattern technique- kids wear, Casual ladies shirt, computerized pattern development for children's, men and women's.

**Unit 2** **3**
Designing & construction of garments with style features, men's shirt/ women's top

**Unit 3** **5**
Designing with style features and constructing men's and women's trouser

**Unit 4** **2**
Designing & construction waist coat- Men's/Women's.

**Unit 5** **2**
Manual and computerized grading of patterns – Men's, Women's and Kids

**IV Semester**
**B.Sc. (Fashion and Apparel Design)**
**HISTORY OF TEXTILES AND COSTUMES**

**FAD403A**
**Total Hrs. 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- Imparting Knowledge of textiles through the previous centuries to influence the sense of design, symbolism of motifs and colours

**Unit 1:** **5Hrs**
Introduction to world textiles and costumes- History, Types, Motifs & Symbols

**Unit 2:** **8 Hrs**
Pre-historic textiles & costumes- Indus Valley, Egyptian, Mesopotamian, French, Greek, Roman, Japanese & Byzantine

**Unit 3:** **8 Hrs**
Ancient Indian textiles & costumes- Vedic, Mauryan, Kushans, Satavahanas, Gupta & Mughal

**Unit 4:** **3 Hrs**
French revolution, French costumes- from Renaissance to 20$^{th}$ century

**Unit 5:** **6 Hrs**
Textiles & costumes of Colonial, Victorian, Edwardian Era, WW I & WW II, factors influencing Costume Change- style, religious, location, climatic period & world affairs

**Unit 6:** **8Hrs**
An overview of textiles – textile design, symbolic motifs of various culture from ancient to modern day- woven- Brocades of Banaras , Baluchuri, Chanderi, Tanchoi, Kanjivaram, Himru, Amru, Mashru& Dacca muslin, Dyed- tie & dye, Ikat, double Ikat, Bandini, Printed- block, screen, applied – dyed & painted textiles – Kalamkari, Madhubani,Warli.

**Unit 7:** **8Hrs**
A study of regional textiles & costumes of India- north, east, west & south

**References:**


1. Jamila BrijBhusan Master piece of Indian jewellery, Taraporevala- Bombay,1979.
2. Jamila BrijBhusan, The Costumes and textiles of India, Taraporevala- Bombay.1958
3. Konemann A history of Fashion in the 20$^{th}$ Century - 1974
4. Parul Bhatnagar, Traditional Indian costumes & textiles", Abhishek Publication.2004
5. Phyllis Tortora, Keith Eubank Survey of historical costumes, A History of western dress", , Fairchild Publication,2009

**IV Semester**
**B.Sc. (Fashion & Apparel Design)**
**HISTORY OF TEXTILES AND COSTUMES**

**Practicals**
**FAD403B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1:** **3**
Sketching of costumes of Egyptian, Greek, Roman, French. Chinese & Japanese

**Unit 2**: **3**
Sketching of costumes – Indus valley, Vedic, Mauryan, Kushans & Gupta.

**Unit 3:** **3**
Sketching of costumes –Mughal (men & women.)

**Unit 4:** **3**
Sketching of regional costumes of India (men & women)

**Unit 5:** **4**
Preparation of concept, Research and Mood board for contemporary design based on one world costume and one Indian costume.

**IV Semester**
**B.Sc. (Fashion and apparel Design)**
**TEXTILE AND APPARELTESTING**

**FAD404A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

- To help students to understand the testing of fabrics and garment accessories.
- To provide students with the knowledge on testing.

**Unit 1** **6Hrs**
Introduction to textile testing, objectives of testing, Selection of samples for testing

**Unit 2** **4Hrs**
Yarn testing - yarn count, Yarn twist, twist direction, amount of twist, and effects of twist on fabric properties, measurement of twist.

**Unit 3** **12Hrs**
Fabric testing- fabric dimensions- length, width, thickness, determination of fabric weight - GSM measurement and its application to different fabrics, cover factor, air permeability, stiffness, drape, crease resistance, abrasion resistance, pilling, bow & skew.

**Unit 4** **6Hrs**
Determination of colour fastness to laundering, rubbing, light and perspiration, Fabric shrinkage

**Unit 5** **8Hrs**
Tensile testing of textiles- Terminology and definition- load, elongation, stress, strain test methods, bursting strength test, Tear strength.

**Unit 6** **12Hrs**
Garment and garment accessories testing – testing of fusible interlinings, zippers, elastic waistband, sewing threads, buttons, snap fasteners, wear testing. Tensile properties of seams and stitches, zipper strength test, dimensional stability of fabrics. Colour fastness of garments to washing and light.

**References**


1. Arindam Basu, Textile Testing, SITRA Publications.1986
2. Booth, J.E “Principles of Textile Testing,” CBS Publishers and Distributors, 1996
3. Mandal, J.N. Divshikar, D.G” A Guide to Geo Textiles Testing,” New Age International Ltd, 2002
4. Pradeep V. Mehta, “Managing Quality in Apparel Industry,” New Age international Ltd.1998
5. Saville, B.P. “Physical testing of Textiles”, Woodhead Publishing Ltd. 1999

**IV Semester**
**B.Sc. (Fashion and apparel Design)**
**TEXTILE AND APPAREL TESTING**

**Practicals**
**FAD404B** **Exam- 3 hours**
**16 practical's of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **3**
Fabric construction particulars: aerial weight, thickness, thread count, cover factor equipments to be used are GSM cutter & Weighting balance, Beasley Balance, Pick Glass, Dissection Needle, Calculator and Fabric thickness tester.

**Unit 2** **1**
Determining shrinkage of fabric using shrinkage tester.

**Unit 3** **1**
Determining fabric bending properties using stiffness tester

**Unit 4** **1**
Determinations of fabric drape using drape meter.

**Unit 5** **3**
Determining fabric tensile strength using tensile tester.

**Unit 6** **1**
Determining Fabric Abrasion using abrasion tester.

**Unit 7** **1**
Determining fabric crease recovery using crease recovery tester.

**Unit 8** **1**
Determining fabric Pilling using pilling tester.

**Unit 9** **1**
Determination of colour fastness to rubbing using crock meter.

**Unit 10** **1**
Determination of colorfastness to washing using washing fastness tester.

**Unit 11** **1**
Determination of colorfastness to light

**Unit 12** **1**
Determination of garment accessories testing - Button, Snap pull test, zipper test, seam strength test.

**IV Semester**
**B.Sc. (Fashion and apparel Design)**
**APPAREL PRODUCTION**

**FAD405A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To introduce various departments of an apparel industry
- To impart skills in apparel production in an Industrial set-up.

**Unit 1** **4 hrs**
Introduction to Apparel production, Seams- types, end use, stitch dimension, performance as per ASTM standards.

**Unit 2** **4hrs**
Sourcing- Introduction to fabric and accessory sourcing, its types.

**Unit 3** **8hrs**
Sampling department- importance of sampling department, objectives, types of sample- prototype, fit sample, pp sample, size set, production sample, shipment sample. Introduction to Spec sheet and its importance, Technical design reading, Tech pack analysis& objective, creating tech pack.

**Unit 4** **6hrs**
Cutting department: Machineries, fabric spreading, pattern laying, marker preparation, sorting, numbering &bundling, fusing department- methods of fusing, fusing machines

**Unit 5** **8 hrs**
Production department: selection of production system- progressive bundle system, unit production system, modular manufacturing, piece work. Production planning, Linear manufacturing process.

**Unit 6** **6hrs**
Finishing & pressing department, trimming department, packing department

**Unit 7** **4hrs**
Apparel accessories & components - fasteners, labels, support materials, decorative trims, tapes & packing materials

**Unit 8** **4hrs**
In process quality inspection, objectives methods, advantages, inspection methodology, final inspection, random inspection, general inspection method for shirts, trouser and kids garments.

**Unit 9** **4hrs**
Introduction to export documentation, objectives, terminologies, principle documents, auxiliary documents, risk cover, insurance, ECGC, quality control and pre-shipment

inspection, export credit, short, medium, long term credit, packing credit, negotiation of bills, payment procedures in export trade.

**References:**


1. Chutler A J, Introduction to clothing Production Management, Blackwell Science,1998
2. Harold Carr & Barbara Latham, the Technology of Clothing Manufacture, Oxford Pub. USA, 1994
3. Rajesh Bheda, Managing productivity in the Apparel Industry, CBS pub., New Delhi.2003
4. Ruth E G, Grace I Kunz Apparel Manufacturing Sewn Product analysis

UK, 2005


**IV Semester**
**B.Sc. (Fashion & Apparel Design)**
**APPAREL PRODUCTION**

**Practicals**

**FAD405B** **Exam- 3 hours**

**16 practical's of 3 hrs each** **Exam- 35 marks**

**Internal Assessment- 15**

**Unit 1** **2**

Study of international stitch number and preparation of technical specification sheet, Analysis of spec sheet.

**Unit 2** **3**

Stitching of jackets for Men's / Women's

**Unit 3** **3**

Stitching of casual shirt Men's / Women's using block including development of illustration, flat sketches, technical drawing, spec sheet, component drawing, consumption & calculation of fabric, trims and supporting materials, costing of the product.

**Unit 4** **3**

Stitching of formal shirt Men's / Women's using block including development of illustration, flat sketches, technical drawing, spec sheet, component drawing, consumption & calculation of fabric, trims and supporting materials, costing of the product

**Unit 5** **3**

Stitching of trouser Men's / Women's using block including development of illustration, flat sketches, technical drawing, spec sheet, component drawing, consumption & calculation of fabric, trims and supporting materials, costing of the product

**Unit 6** **2**

Folio on all accessories & components used in Apparel Industry.

**V Semester**
**B.Sc. (Fashion and apparel Design)**
**FASHION RETAILING, MARKETING AND MERCHANDISING**

**FAD501**

**Total Hrs: 64** **Exam Hours: 3**
**Exam Marks: 100**
**Internal Assessment: 50**

**Objectives:**

- To acquaint students with various marketing and merchandising procedures
- To introduce students to fashion retailing.

**Unit 1** **5hrs**
Introduction to Retail, Marketing, Management and Merchandising, terminologies

**Unit 2** **9 hrs**
Fashion retailing-History, Scope, Importance, Types(Domestic and International), techniques, channel of distribution

**Unit 3** **9hrs**
Marketing – types, four P's, fashion promotion advantages, trade shows, Market weeks, exhibitions, fashion shows, market survey and research

**Unit 4** **6hrs**
Types of merchandising, concepts, merchandise planning, sampling- Importance, counter sample.

**Unit 5** **5 hrs**
Brand building-Introduction, strategies, image building, brand expansion, global trends

**Unit 6** **12 hrs**
Visual Merchandising-Interior, exterior window display, store planning and layout-fixtures, location, lighting, dressing, props and promotions, masking and proscenia, mannequins and three dimensional dressing

**Unit 7** **6 hrs**
Introduction to customer relationship management, measuring customer relationship management, customer response, satisfaction, loyalty, customer relation and complaint management.

**Unit 8** **12 hrs**
Retail merchandiser, concept, quick response, Just –in-Time, merchandiser calendar, trend analysis, forecast analysis, concepts of apparel product line, planning, directing, coordinating and controlling

**References**


1. Laura L Bliss, Study Guide Visual Merchandising and Display III edition, Fairchild Publications, 1995
2. Castelino, M. Fashion Kaleidoscope, Rupa & Co. 1994.
3. Gibson, G. Vedomani, Retail Management, Jaico Publishing House, Bangalore
4. Elaine Stone, The Dynamics of Fashion, Fair Child Publication,1999
5. Brenda Sternquist, International Retailing, Fairchild Publication, New York

6. Martin. M. Pegler, Store Window No.14, No 12, Visual reference Publishers, NewYork, 2004

**V Semester**
**B.Sc. (Fashion and apparel Design)**
**APPAREL COMPUTER AIDED DESIGN-I**

**FAD502A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

- To help students to understand the fundamentals and principles of CAD.
- To provide students with the knowledge of CAD and their applications.

**Unit 1** **6Hrs**
CAD definition, Fundamentals of CAD – Introduction, general process of design, application of computers for design, Benefits of CAD, Computers & the Fashion Industry, Quick response technology, CAD in Today's Fashion Industry

**Unit 2** **4Hrs**
Hardware in CAD – Introduction, the design workstation, the graphics terminals, operator, input devices, plotters and other output devices, the central processing unit, secondary storage.

**Unit 3** **6Hrs**
Computer Graphics Software and Data in Apparel Industry – Introduction, the software configuration of a graphics systems, functions of a graphics package, Database structure & content, Geometric modeling – 3D modeling, other CAD software feature.

**Unit 4** **6Hrs**
Basic maintenance of operations – preference, setting up a document, what is resolution, saving files, file formats, zooming in & out, view options, CAD approach to design, vector graphics object VsRaster design.

**Unit 5** **4Hrs**
Introduction to DBMS features of a DBMS, Advantages of using DBMS.

**Unit 6** **6Hrs**
Photoshop & Corel Draw – Introduction, features and its applications.

**Unit 7** **8Hrs**
Fashion trend forecasting websites – Introduction, leading online trend-analysis and research service on creative and business intelligence for the apparel, style, design and retail industries, insight and creative inspiration, real-time retail coverage, seasonal trend analysis, consumer research and business information.

**Unit 8** **4Hrs**
CAD applications in fashion field – garment designing, weaving, knitting and embroidery and textile dyeing and printing

**Unit 9** **4Hrs**

Presentation & Graphics – External & Internal presentation of apparel industry, planning a presentation, Computer – generated presentation, Computer – generated catalogues, Presentation boards (Preparing portfolio presentation), Multimedia and 3D presentation.

**References:**


1. CAD for Fashion Design by Renee Weiss Chase, Prentice hall Pub.
2. CAD/CAM Computer Aided Design & Manufacturing by Mikell P Groover&Mory W Zimmers. Jr, Pearson Education Pub.2000
3. CAD/CAM/CIM by R.Radhakrishnan, S.subramanyan, V.Raju, New Age International Pub.
4. Fashion Design on Computers By M.kathleenColursy, Prentice Hall.2004.
5. Winfred Aldrich, CAD in Clothing & Textiles, Blackwell Science, 1994.


**V Semester**
**B.Sc. (Fashion & Apparel Design)**
**APPAREL COMPUTER AIDED DESIGN - I**

**Practicals**
**FAD502B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Instruction:**
Following softwares are required for the practicals

- Fashion forecasts website
- Photoshop for collage work
- CorelDraw for Flat sketches.
- Fashion Studio for draping of garments
- Pattern making software for pattern making, grading and marker making.

**Unit 1** **2**
Introduction to fashion trend forecasting websites, how to navigate the website, sourcing the computer about fashion trend forecasting

**Unit 2** **2**
Introduction to Photoshop - Photoshop tools in detail, enhancing images, Masking, transforms, working with layers. Merging & blending layers, text effects.

**Unit 3** **2**
Creating an advertising brochure. Painting & rendering in Photoshop, creating & manipulating Fashion Model drawings, gradient's use for rendering & 3D effects, making collage in Photoshop, Applying filters

**Unit 4** **2**
Create Mood / Inspiration, client / customer, colour and Texture board using Photoshop.

**Unit 5** **2**
Introduction to Coral Draw. Learning basic tools of Coral Draw. Using Basic Shapes, Transformations, Duplicate, Cloning. Applying fill, outlines, special effects, shaping objects, creating custom Shapes using basic shapes and other drawing tool, working with the text,

Effects, Shaping object with envelope tool, Power Clip objects, splitting and erasing portion of objects.

**Unit 6** **2**

Creating fashion accessories like necklace, bracelet, anklets, ear ring, and head gear .Etc Using Coral Draw.

**Unit 7** **2**

Motifs development – Symmetrical/Asymmetrical, Balanced/Unbalanced, Repeat – ½ drop, ¼ drop, ¾ drop – H/V. Drop reverse, Design placements on boarders, pallu&allover

**Unit 8** **2**

Logo Designing, Creating Tags & Labels – Main label, Size label, Wash Care label, Content label using Corel Draw

**V Semester**
**B.Sc. (Fashion and apparel Design)**
**FASHION ACCESSORIES**

**FAD503A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**:

- To impart knowledge of fashion Accessories
- To provide opportunity and to design and to develop fashion accessories

**Unit 1** **4 Hrs.**
Fashion accessories- Introduction, definition. History, Classification.

**Unit 2** **6 Hrs.**
Accessory types- Head gears, Foot wear, Bows, ties and belts, Hand bags, Gloves, Scarves, Stoles, Shawls,

**Unit 3** **6 Hrs.**
Materials and processes-leather, straw, fur, wood. Materials required. Material sourcing. Design development & production.

**Unit 4** **8 Hrs.**
Trends and Marketing- Fashion trends and marketing of accessories. Study of any 2 accessory designers. (one Indian and one international)

**Unit 5** **9 Hrs.**
Jewellery- Jewellery Design and production, Types of Jewellery – precious, costume, bridge. Traditional Indian jeweler – temple, kundan, minakari, thewa, filigree, terracotta.

**Unit 6** **4 Hrs.**
Gemology- Introduction to gems, Basic qualities of gems and healing properties of gems.

**Reference:**


1. Claire Billcocks," Century of Bags", Chartwell Books, New Jersey 1997
2. John Peacock, " Fashion Accessories- Men", Thames and Hudson, London, 1996
3. John Peacock, " The complete 20th Century Source Book", Thames and Hudson, London, 2000
4. Malolow Blahnik- Co Collin Mac dolw, " Shoes -Fashion and Fantasies", Thames and Hudson, 1989

**V Semester**
**B.Sc. (Fashion and Apparel Design)**
**FASHION ACCESSORIES**

**Practicals**
**FAD503B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit – 1** **4**
Sketching and rendering of headgear, hand wear, foot wear and hand bags (3 each).Construction of any one.

**Unit – 2** **4**
Sketching and rendering of belts, gloves and construction of any one.

**Unit – 3** **4**
Sketching of Indian jewellery- Mughal Jewellery, Thewa, Kundan Jewellery, Temple Jewellery

**Unit – 4** **2**
Sketching of accessories on women and men's croqui (2 each)

**Unit – 5** **2**
Jewellery designing based on theme. (with Concept Board)

**V Semester**
**B.Sc. (Fashion and Apparel Design)**
**DRAPING**

**FAD504A**
**Total Hrs: 48**

**Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

To introduce the Basic Draping techniques
To familiarize students with Draping methods for different kinds of garments

**Unit 1** **6 Hrs**

Introduction to draping, Tools &equipments used in draping

**Unit 2** **6 Hrs**

Draping Terminology – Apex, Balance, Plumb line, Trueing, Blocking, Blending, Princess line, Clipping and marking.

**Unit 3** **10 Hrs**

Draping- Principles of Draping, Fitting methods

**Unit 4** **12Hrs**

Basic Draping Techniques- Bodice Front, Bodice Back, basic skirt, Dart Manipulation Techniques

**Unit 5** **14Hrs**

Draping Techniques- Dresses-Bias, Princess line, neckline -Cowl, collar- mandarin, peterpan, Sleeves, Yokes –shoulder, midriff, hip line.

**References**


1. Abling, Bina and Maggio, Kathleen, Integrating draping, drafting and drawing, Fairchild Books, Inc.
2. Connie Amaden Crawford, The Art of Fashion and Design, Fairchild Publications
3. Jaffe, Hilde and Relis, Nurie, Draping for fashion design, Pearson Prentice Hall


**V Semester**
**B.Sc. (Fashion and apparel Design)**
**DRAPING**

**Practicals**
**FAD504B**
**16 practicals of 3 hrs each**

**Exam- 3 hours**
**Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **2**

Introduction to Draping

**Unit 2** **2**

Tools &: Equipments used in Draping

**Unit 3** **2**
Basic Draping methods – Bodice Front & Back, Skirt Front & Back

**Unit 4** **4**
Draping – Sleeves, Collars, cowls, Yokes, fullness.

**Unit 5** **4**
Draping Dresses – The Straight Shift, Princess Dress.

**Unit 6** **2**
Development of basic choli and converting the same in to garment.
Draping of designer choli and evening gown, 3D draping.

**V Semester**
**B.Sc. (Fashion and Apparel Design)**
**NEEDLE CRAFT**

**FAD505A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To impart knowledge on various traditional embroideries of India
- To gain practical knowledge on different embroideries of India.

**Unit 1** **2 Hrs**
Introduction to Needle Craft, tools and materials used in needle craft

**Unit 2** **6 hrs**
Embroidery – Definition, Classification, Methods & Implementation of basic embroidery stitch – Straight stitch-Stem, Back, fly stitch; Flat stitch-Satin, Cross; Loop stitch – Herring Bone, Feather stitch; Knotted stitch-French knot, Bullion Knot.

**Unit 3** **6 hrs**
Basic hand stitches- Techniques used, Application of basting, running, tacking, hand overcast, buttonhole, hemming stitches.

**Unit 4** **6hrs**
Crochet – Introduction, Definition, tools, material, techniques, types of Single crochet, double crochet, treble pattern

**Unit 5** **10hrs**
Knitting – Definition, Tools & materials used for Knitting, Techniques employed in knitting, Terminologies, Features & Applications of Elementary stitches (Garter, Stocking, Rib, and Moss), Texture, Rib, Diagonal, Lace pattern, Cable pattern, Cross, Knotted.

**Unit 6** **8 hrs**
Definition, types, Implementation of Patch work, Appliqué, Quilting- tools, material & techniques

**Unit 7** **8 hrs**
Special techniques-Introduction, Methods, Types & Application of Braiding, Hooking, Smocking, Macrame Knotting, Bead & Sequins

**Unit 8** **2 hrs**
Present trend embroideries – Aari work, Zardhosi, cutwork etc.

**References**


1. Anne Mathew, "Vogue Dictionary of Crochet Stitches", David and Charles, London,1989
2. Barbara Snook, "Creative Art of Embroidery", Numbly Pub. Group Ltd, London, 1972 "
3. Gail L., cc Inspirational Ideas for embroidery On clothes and accessories", Search press Ltd, 1993
4. Readers Digest: Complete Guide to Needle work-APH Corp, New Delhi 1996
5. Shailaja Naik, " Traditional Embroideries Of India", APH Publishing corporation, New Delhi, 1996 '

6. Sheila Paine: Embroidered Textile –Thames & Hudson Ltd.1990

**V Semester**
**B.Sc. (Fashion and Apparel Design)**
**NEEDLE CRAFT**

**Practicals**
**FAD505B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **1**
Introduction to Needle craft, tools and equipments used in needle craft

**Unit 2** **2**
Embroidery – Basic embroidery stitch – Straight stitch-Stem, Back, fly stitch; Flat stitch-Satin, Cross; Loop stitch – Herring Bone, Feather stitch; Knotted stitch-French knot, Bullion Knot, pearl stitch, weaving – spider web, any one basic machine embroidery.

**Unit 3** **2**
Crochet – Single, Double & Treble

**Unit 4** **3**
Knitting – Basic- purl, Knit, Garter, Stocking, Rib

**Unit 5** **5**
Applique-Hand & machine, Quilting - Hand & machine, Patch work - Hand & machine, Smocking-Basic & Honey Comb , Macrame-any two, Braiding, Hooking, Lace and Ribbon work , Bargello.

**Unit 6** **3**
Present trend embroideries – Aari work, Zardhosi, cutwork etc.

## IN-HOUSE TRAINING

**FAD506**
**Hrs / Week: 6**

**Exam Marks: 100**
**Internal Assessment: 50**

**Objectives**

- To impart knowledge on working of apparel industry
- To gain practical knowledge on different departments of apparel industry

### Internship Training/ Craft Documentation

Internship with any garment based industry or company for a minimum period of 30 days. A report to be submitted for evaluation.

**Craft Documentation**
**Objectives**

- In depth knowledge of Textiles and handicrafts.
- To learn research and documentation of various Indian crafts by visiting and meeting the craftsman and artisans personally.
-

Documentation should contain the following

- Introduction
- Aim
- Objectives
- Hypothesis
- Procedure
- Design
- Pictures of crafts
- Questionnaire for survey/ information collection.
- Results and discussion
- Summary and conclusion
- Bibliography

**VI Semester**
**B.Sc. (Fashion and apparel Design)**
**ENTREPRENEURSHIP DEVELOPMENT**

**FAD601**
**Total Hrs: 64** **Exam Hours: 3**
**Exam Marks: 100**
**Internal Assessment: 50**

**Objectives**

- To develop entrepreneurship skills among the students. To familiarize the students with the process and procedure of setting up new enterprises.

**Unit 1** **10hrs**
Introduction to entrepreneurship, development of entrepreneurship, role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.

**Unit 2** **10hrs**
Entrepreneurial support by state, central financial institutions, organizations. Government policies with reference to textile and apparel industry.

**Unit 3** **10hrs**
Business planning- Starting a new venture related to apparel industry, essentials of a successful centre. Formalities of opening a firm, the status of firm, Individual proprietor/partnership/ Pvt. limited company & public Ltd company, bank formalities, term loan, working capital, project financing.

**Unit 4** **14hrs**
Location & plant layout-factors influencing plant location, building, structure, lighting, Ventilation, material handling, availability of labour, material management and transportation. Plant layout, ergonomics safety & security to be considered while planning the layout.

**Unit 5** **14 hrs**
Industrial sickness and remedies, tax planning, VAT, Patent Rules, Factory Act, Minimum wages, knowledge of exemptions & deductions.

**Unit 6** **6hrs**
Environmental considerations and social responsibilities.

**References**


1. Ormerod A, Textile Project Management, The Textile Institute, 1992.
2. SangramKeshariMohanti, Fundamentals & Entrepreneurship: 2009: PHI learning.
3. Terry & Franklin, Principles of Management, AITBS, 2002
4. Vasanth Desai, The dynamics of entrepreneurial development & Management: 6th edition Himalaya publish house. 2009.

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**APPAREL COMPUTER AIDED DESIGN - II**

**FAD602A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

- To help students to understand the fundamentals and principles of CAD/CAM/CIM.
- To provide students with the knowledge of CAD/CAM/CIM and their applications.

**Unit – 1** **10Hrs**

CAD – Introduction, types of CAD – Textile design systems (Knitted fabrics, printed fabrics, yarn-dyed fabric), Illustration/sketchpad systems (Texture mapping: 2 ½ and 3D draping software), Embroidery Systems, Specification and Costing Systems, Digitizing Systems, Grading Systems, Marker Making Systems (Plotting, cutting operations, PDS –Pattern Design Software, Body measurement software), Commercial Software Systems.

**Unit – 2** **8Hrs**

CAM – Introduction, Categories – Computer monitoring & Control and Manufacturing support, Computer generated work standards – Time standards & work Measurements.

**Unit – 3** **8Hrs**

Computer aided process planning (CAPP) – Retrieval type & Generative type of CAPP systems and benefits of CAPP.

**Unit – 4** **8Hrs**

CIM – Introduction, its types – Traditional and Computer Integrated Production Management systems. Inventory Management & Production scheduling -MRP-Material Requirement Planning, CRP – Capacity Requirement Planning, SFC (Shop floor control). Material handling systems, Human labour in the Manufacturing systems and its benefits. Product Data management system (PDM).

**Unit – 5** **4Hrs**

CAQ (Computer Aided Quality Control) – Introduction, Terminologies, Inspection methods – Contact and Non – Contact inspection methods with examples and its uses.

**Unit – 6** **10Hrs**

Applications – Fabric lay Planning, computerized cutting, sorting and Labelling, Bundling, Fabric pattern designing, modification for size & fit, Pattern Making (PDS), grading and Marker making, marker efficiency using pattern making software. Future of CAD/CAM.

**References:**


1. Annual World, Computers in the world of textiles, Textile Institute, UK, 1984.
2. Berkstresser. Buhanan & Graddy, Automation in the Textile Industry: from Fibres to Apparels, The Textile institute, UK.1995
3. Taylor P, Computers in Fashion Industry, Heinemann pub., 1990
4. Veinsinet DO. Computer Aided Drafting & Design-Concept & Application, 1.987
5. Winfred Aldrich, CAD in Clothing & Textiles, Blackwell science, 1994

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**APPAREL COMPUTER AIDED DESIGN - II**

**Practicals**
**FAD602B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Instruction:**
Following softwares are required for the practicals

- Fashion forecasts website
- Photoshop for collage work
- CorelDraw for Flat sketches.
- Fashion Studio for draping of garments
- Pattern making software for pattern making, grading and marker making.
- Visual Merchandising Software

**Unit – 1** **2**
Developing Croqui figures for men, women and children using Photoshop/ Corel Draw.

**Unit – 2** **3**
Draping of garments on men's, women's & children casual, party, night, sports, office/formal wears using Fashion Studio software / Photoshop / Corel Draw.

**Unit – 3** **3**
Design flat sketches along with stitch specification for the following:
Children – Girls (A-line & yoke frock), Boys (shirt & shorts)
Adults – Women's (Top, Skirt, gown), Men's (Shirt, Kurtha, Trouser).
For the above create spec sheets, cost sheets for each garment using Fashion Studio software / Photoshop / Corel Draw.

**Unit – 4** **3**
PDS – Introduction, pattern for digitizing, Getting started in Pattern Design – Introduction to PDS (pattern design screen), File menu, Opening and saving, Managing Pieces on the screen, measure, Edit and View functions. Point & Notch Functions, line functions, Piece functions.

**Unit – 5** **2**
Prepare Patterns - A-Line Frock, Skirt, Shirt, Dress / Top, Shorts and Trousers

**Unit – 6** **2**
Introduction to grading. Grade the above patterns. Marker Making. Make marker plan for women's Top/Skirt/ Men's Shirt/Trouser/Kurtha.

**Unit – 7** **1**
Window display products / commodities for a retail shop using VM software

**VI Semester**
**B.Sc. (Fashion and apparel Design)**
**GARMENT SURFACE ORNAMENTATION**

**FAD603A**
**Total Hrs:48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**

- To impart knowledge on various traditional embroideries of India
- To gain practical knowledge on different embroideries of India.

**Unit 1**: **5 Hrs**
Introduction to Traditional embroideries

**Unit 2** **12hrs**
Traditional Indian embroidery- History, types, Symbolism of embroidery of different states of India –Kutch, Kathiawar, Sindh, Phulkari, Kantha, Kashida - Material, motifs, symbolism, colour, stitches, technique, relevance.

**Unit 3** **14hrs**
Traditional Indian embroidery- History, types,Kasuthi, Chambarumal, Zardozi, Chikankari, - Material, motifs, symbolism, colour, stitches, technique, relevance

**Unit 4** **14hrs**
Tribal Embroidery- Introduction, Types –Nagaland, Manipuri, Lambadi, Thoda with their traditional influence, symbolism, techniques, fabric, stitches &colour.

**Unit 5** **3 hrs**
Western Embroidery – Introduction, types – Bargello and Persian embroidery.

**References**


1. Satheesan, Innova: Indian ethnic designs, Honesty Publishers and Distributors, Mumbai.2009
2. Savithri Pandit: Indian Embroidery 1999
3. Shailaja. D. Naik: Traditional Embroideries of India-APH Corp, New Delhi 1996
4. Sheila Paine: Embroidered Textile –Thames & Hudson Ltd.1990
5. Shrikant, Usha, Designs for a lifetime, Honesty publishers and Distributors, Mumbai.2010
6. Usha Srikant : Ethnic Embroideries of India, 1998 and 2000.

**VI Semester**
**B.S (Fashion & Apparel Design)**
**GARMENT SURFACE ORNAMENTATION**

**Practicals**
**FAD603B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **1**
Introduction to traditional Indian Embroideries

**Unit: 2** **5**
Traditional Indian embroidery –Kutch, Kathiwar, Sindh, Phulkari, Kantha, Kashida

**Unit: 3** **5**
Indian embroidery - Kasuthi, Chambarumal, Zardozi, Chikankari

**Unit: 4** **4**
Tribal Embroidery- Introduction, Types –Nagaland, Manipuri, Lambadi, Thoda

**Unit 5**
Western Embroidery – Bargello work **1**

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**APPAREL QUALITY MANAGEMENT**

**FAD604A**
**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- To acquaint students with the Apparel Total Quality Management by understanding different quality Assurance practices.

**Unit 1** **4Hrs**
Definition of Quality, Dimensions of quality, quality planning, and importance of quality.

**Unit 2** **8Hrs**
TQM principles: Customer satisfaction, customer perception of quality, Intrinsic & Extrinsic quality, service quality, customer retention, continuous process improvement, Juran Triology, PDSA cycle, 5S, Kaizen, 6 sigma.

**Unit 3** **6Hrs**
Managing quality: Traditional vs Modern quality management, Quality control (QC), objectives of QC and inspection, Quality Assurance (QA), QA system,

**Unit 4** **6Hrs**
Importance of Quality control in Garment industry, Fabric inspection, identification of woven and processing defects, 4 point & 10 point system, IPQC, AQL standards

**Unit 5** **6Hrs**
Major inspection points to be verified in a final inspection for Men's Shirt & Trouser, Ladies Top, Trouser, Skirt and Kids Garment.

**Unit 6** **4 Hrs**
Care labels, International care labeling system, Japan/ Canada/ British care labeling system, Eco labels.

**Unit 7** **10hrs**
Quality system;
Need for ISO 9000, Major elements in ISO 9001-2000, internal auditing, Environmental Management system, ISO 14000 series standards, Environmental Management programme, and other quality management standards of Apparel industry, AATCC, ASTM--standards, significance & importance of the same.

**Unit 8** **4Hrs**
Zero defects, JIT, Poka-yoke, and quality circle.

**References:**


1. Chutler A J, Introduction to Clothing Production Management, Blackwell science, UK, 1998
2. Control, ASCQ quality Press, Marcel Dekker Inc, New . York, 1992
3. Gerry Cooklin, Introduction to Clothing manufacture, Blackwell science, UK, 1991
4. Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford pub., lTSA, 1994

5. Pradip V Mehta, Quality Control in Apparel Industry, NIFT pub., New Delhi, 2001
6. Ruth E C, Apparel Manufacturing & Sewn Product Analysis. , Pradip V Mehta, Introduction to quality

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**APPAREL QUALITY MANAGEMENT**

**Practicals**
**FAD604B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **4**
Fabric inspection (4& 10 points systems)

**Unit 2** **2**
Designing and Inspection of Apparel care labels, contents, Dimensions and positioning of the labels.

**Unit3** **4**
Final Inspection of Garments. Checking points and methods of checking of Men's Shirt, Trouser, Ladies Top, Trouser and Kids garment

**Unit4** **6**
Preparation of specification sheets for Men's, Women and Kids wear.
Note: The Final Inspection checking points as listed below for Men's shirt, similarly the check list to be prepared for women wear and kids wear for practicing by the students.
Shirt Inspection Check list:

| No | Location | Inspect For |
|---|---|---|
| 1 | Collar | Both points are same or not, stripe or checks is matched accurately, stitch, collar flat or not, interlining, bubble presence, collar stick placement. |
| 2 | Size | Size label is in correct place, and every part size is correct or not. Size as per the measurement chart, allowances etc. |
| 3 | Button & Button hole | Placed in right place or not, evenness of the gap between the buttons, Button stitches, finishing, matching, & to make sure button is not broken. Placement of spare button as per specification. |
| 4 | Pocket | Pocket upper edge is horizontal or not, pocket position, size, stitch, stripe or check match, flat or not. |
| 5 | Hem | Stitch, puckering, edge free from stitch. |
| 6 | Yoke & shoulder | Stitch, puckering, DNLS, matching of stripe or checks. |
| 7 | Side seam | Pattern matching, stitch, free from raw edge, puckering, straight stitch, |
| 8 | Cuffs | Stripes or checks matching, top stitch, flat or not., size of the cuff |
| 9 | Finished appearance | Trimming of edges and threads, oil marks, dirt, finger marks broken needle, stitch missing, fabric fault, colour matching, balancing of different components. |
| 10 | Buyers specifications | If the Buyer or the importer has given a separate checklist for the inspection, the inspection to be carried out to verify the sample from the bulk selected is matching to the requirement or not. |

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**CLOTHING CULTURE AND COMMUNICATION**

**FAD605A**

**Total Hrs: 48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives:**

- **To create awareness about clothing culture**
- **To impart knowledge of clothing communication and fashion expression**

**Unit 1** **4 Hrs**
Understanding clothing and Clothing culture.

**Unit 2** **6 Hrs**
Individual & dress, personal communication, personal expression, image building, psychological and sociological influence on clothing.

**Unit 3** **4 Hrs**
Clothing culture and communication, men and women clothing groups, role and status of clothing.

**Unit 4** **6 Hrs**
Clothing culture and communication based on conservative, labor, liberal, social, democrat, customs and marital status.

**Unit 5** **4 Hrs**
Individual and dress, personal communication, personal expression, image building. Psychological and sociological influence on clothing.

**Unit 6** **4 Hrs**
Fashion, fashion concepts, differences of fashion and non- fashion, recurring cycles of fashion, styles and fashion.

**Unit 7** **8 Hrs**
corset culture, fashion in $20^{th}$ century. Women at war, between war and post war. Equality between men and women, sexual revolution, marriage and family, education and employment. Evolution of different types of costumes.

**Unit 8** **6 Hrs**
Minis, maxis, unisex, fit woman, glamorous woman, casual and formal clothing. Fashion for all ready to wear fashion, mass marketing of fashion.

**Unit 9** **4 Hrs**
Youth style and fashion, teddy boy, skins, mods, hippies, punks, taste of youth and their life style.

**Reference**


1. Anderson Black, J "A History of Fashion" Orbis Publishing Ltd., USA. 1985.
2. Elizabeth Rouse, Understanding Fashion, Blackwell Science, UK, 1989.
3. Jane Ashelford, The art of dress: Clothes & Society, ISBN1500-1914, Amazon com.
4. Wilcox, T The dictionary of costume, Batsford Ltd., UK.

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**CLOTHING CULTURE AND COMMUNICATION**

**Practicals**

**FAD605B** **Exam- 3 hours**

**16 practicals of 3 hrs each** **Exam- 35 marks**

**Internal Assessment- 15**

**Unit 1:** **3**

Sketch a protective clothing for men/ women using flat sketch with spec sheet.

**Unit 2:** **3**

Sketch clothing of royalty/ status symbol to depict modesty for men/ women using 10 head croqui.

**Unit 3:** **3**

Sketch men and women clothing of any custom of the world using 10 head croqui.

**Unit 4:** **3**

Sketch clothing that communicate their profession for men or women using 10 head croqui.

**Unit 5:** **4**

Sketch different types of corset during the Victorian era.

**VI Semester**
**B.Sc. (Fashion and Apparel Design)**
**FASHION PORTFOLIO & DESIGN COLLECTION**

**FAD606A**
**Total Hrs:48** **Exam Hours: 3**
**Exam Marks: 70**
**Internal Assessment: 30**

**Objectives**:-

- To make students understand the importance and significance of portfolios and presentations
- To impart practical skills for portfolio presentations.

**Unit 1** **6Hrs**
Portfolio preparation, Definition, types and importance,
Contents of portfolio, Different portfolio presentation skills and Material management

**Unit 2** **6 Hrs**
Fashion Forecasting and colour Forecasting, Use of online service for forecasting

**Unit 3** **6 Hrs**
Clothing categories, styling, price and size ranges for men's wear, styling, price and size ranges for women's and styling, price and size ranges for kids wear

**Unit 4** **4 Hrs**
Technical Details, Working Drawings, development of spec, flat sketch and costing

**Unit 5** **16 Hrs**
Choosing forecast, Mood Board, client board and Colour board, Swatch Board, Illustrations and Flat sketches Production of Spec sheet and costing, Development of Logo, Hang tags, concept board

**Unit 6** **6 Hrs**
Fashion Photography. Knowledge of different lighting – indoor and outdoor, aperture, speed and locations used in fashion photography. Study the work of well known fashion photographers

**Unit 7** **4 Hrs**
Fashion dressing – makeup- indoor, outdoor, hairstyle,
Self grooming- Introduction, importance and application.

**References-**


1. Drake/ Spoone/Greenwald "Retail fashion Promotion and Advertising"
2. Gini Stephens Frings " Fashion- from concept to consumer" Pearson Education
3. Jarnow, J and KG Dickenson, "Inside the Fashion Business" Prentice Hall, 1997
4. Jerligan Easterling "Fashion Merchandising And Marketing´ Pearson Education
5. Polly Guerin " Creative fashion Presentations" Fairchild Publications

**VI Semester**
**B.Sc. (Fashion and apparel Design)**
**FASHION PORTFOLIO & DESIGN COLLECTION**

**Practicals**
**FAD606B** **Exam- 3 hours**
**16 practicals of 3 hrs each** **Exam- 35 marks**
**Internal Assessment- 15**

**Unit 1** **10hrs**

An individual Portfolio presentation based on a theme

a. It should have min 2 collections of 5 ensembles each (4 wearable, 1 non wearable)
b. Portfolio should include development of Story board, Mood board, Colour board, Texture board, Swatch Board, Logo, Working drawing- costing, spec sheet, development of garments by drafting, draping and Flat Pattern
c. Produce one collection from the portfolio and to be presented as fashion show.

**Unit 2** **6hrs**

Preparation of Concept boards for four seasons of three ensembles each.