

Design (Fashion)

Unit 1 - Pattern Making

- a) Introduction to Patternmaking
- b) Tools used for pattern making
- c) Body Measurements
- d) Basic Bodice Blocks, Basic shirt, blouse, skirt & trouser
- e) Fabric consumption calculations
- f) Fabric preparation for Cutting, Grain lines
- g) Cutting guidelines, 100% matching , Print matching
- h) Marker making, marker efficiency
- i) Cutting parts, layering
- j) labeling & Bundling

Unit 2 - Garment Construction

- a) Sewing machine history
- b) Types sewing Machines
- c) Stitch Types - Lock stitch, chain stitch and other
- d) Types/ classification of seams, seam diagrams
- e) Sewing machine needles, needle parts
- f) Sewing thread – types, Quality
- g) Apparel production system
- h) Different types of production systems
- i) Finishing process in garment industry – Tools & Machines used
- j) Quality Control

UNIT 3 – An overview of Indian Textile Industry

- a) Textile industry- history, development and status, organised and unorganised sectors in Indian Textiles, Different subsectors like spinning, power loom, processing, apparels and made up sectors. Different segments of textile industry
- b) Loom and its different parts, different types of loom.
- c) History of garment construction and functional clothing

UNIT 4 – Textile Fibres

- a) Textile Fibers – Definition, Classification, Manufacturing, Physical & Chemical Properties of natural fibres – Cotton, Linen, Wool, Silk and Jute.
- b) Man-made fibres – Acrylic, Polyester, Nylon, Acrylic, Spandex / Lycra, Viscose Rayon& Tencel.

UNIT 5 –Textile Yarns

- a) Yarn – Definition, Classification- Single Yarn, Ply Yarn, Cord Yarn, Double Yarn, Slub yarn, Retine Yarns, Grandelle yarns, Textured yarns , Use of these yarns in fashion design
- b) Physical properties of Yarn -, Elongation, Twist (S & Z type),
- c) Preparation of yarns

UNIT 6 - Construction of fabrics

- a) History of fabric development, hand woven fabrics, woven and non-woven fabrics.
- b) Production of cloth on basic loom (handloom)
- c) Fabric manufacturing techniques – Weaving processes – Warp winding, Warping, Sizing etc.
- d) Primary and Secondary & Auxiliary motions of power loom.
- e) Shuttle-less loom - working Principles of Air jet, Water jet, Projectile and Rapier loom.
- f) Knitting - Definition, Needles of knitting machine, types of Knits.
- g) Nonwovens – types, machinery, mechanism.
- h) Different types of fabric defects and their remedies

UNIT 7 – Woven structure

- a) Study of design, draft and peg plan for different weaves; weave calculations; advantages and disadvantages
- b) Different types of weaves/ weaving designs – plain, satin, sateen, twill, jacquard, bird's eye, basket, ribbed, crepe, pile, lappet, dobby, tri-axial, decorative weaves
- c) Principle of formation of pile construction of three, four, five and six pick terry fabrics. Their method of drafting and denting.
- d) Characteristics and uses of each of the weaves.

UNIT 8 – Surface enrichment techniques

- a) Surface enrichment techniques – dyeing, printing, tie and dye, natural dyeing
- b) Classification and types of dyes/colouring matter; chemistry of dyes and pigments- composition, structure, properties, affinity towards fibres, method of application, fixing, after treatments and fastness properties.

UNIT 9 – Textile Printing

- a) Introduction to printing and its Historical Background
- b) Style of printing – Direct, Resists, Discharge,
- c) Hand printing, roller printing
- d) Methods of printings, After treatment of printed material

Unit 10 – Traditional Textiles of India

- a) Introduction
- b) State wise textiles of India
- c) Surface Design Techniques
- d) Introduction to Basic embroidery stitches
- e) Tools for embroidery, printing and weaving

Unit 11 –Traditional Textiles & Embroideries of North, West & East India

- a) Embroidered textiles of different states of India
- b) Embroidered fabric – Phulkari of Punjab, Kashida kari of Jammu & Kashmir

- c) Embroideries of Rajasthan & Gujrat,
- d) Textiles of North east
- e) Chamba Roomal
- f) Applique work, mirror work, bead work , Ribbon ,Cut work &Patch work
- g) Zari & Zardozi work, Chikankari, dabka work
- h) Banarasi brocade
- i) Shawls of India
- j) Kantha of Bengal
- k) Dacca muslin
- l) Baluchari
- m) Mekha Saree
- n) Naga Shawls
- o) Manipuri fabrics
- p) Paithani
- q) Maheshwari saree
- r) Kasuti
- s) Pipli of Orissa

Unit 12 – Printed & Dyed Textiles of India

- a) Block printing
- b) Dabu printing
- c) Ikkat prints
- d) Tie & dye
- e) Patan Patola
- f) Batik Fabrics

Unit 13 – Textiles of Southern India

- a) Kancheepuram saree, Ikkat
- b) kalamakari, banajara embroidery
- c) Madras prints

Unit 14 – Textiles Weaving

- a) Introduction to weaving and its different types
- b) Weaving plan with diagram
- c) Different style of traditional weaving