

IV Year B.Tech. Textile Technology I - Semester	L	T	P	To	C
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TT423 APPAREL PRODUCTION TECHNOLOGY

Course Description & Objectives:

This Course Teaches The Students About Fundamental Concepts Of Garment Merchandising that includes the types of merchandising, product development, sampling procedures, procurement techniques, costing and various channels of sourcing.

Course Outcomes:

At the completion of this course, the student should be able to

- 1. Understand the structure of garment industries in India & Globally*
- 2. Understand Different concepts and terminology of Garment manufacturing process.*
- 3. Understand different concepts in Pattern Making, cutting technology, fusing technology etc*
- 4. Understand different types of Stitches and seams*
- 5. Understand different concepts in inspection and transportation and warehousing.*

UNIT I - Introduction & Cutting

The Garment Industry: Structure of the garment Industry , sectors of Industry , product types and organization, Apparel industry in India, Domestic industry , size of the industry , nature of the industry , its developments in recent years, Export industry: Size and nature of the industry.

Types of Fabric Packages – Types of Fabrics – One Way – Two Way Fabrics – Their effect on spreading TYPES OF SPREADING now, new & nud – Methods of Fabric spreading – Spreading equipment – Computerized spreaders – Marker making –Marker efficiency– Factors affecting marker efficiency – Marker duplicating methods – Computer aided marker making.

UNIT II - Pattern Making & Cutting

Basic Pattern Making: Measurement Taking – Size chart and Measuring of Sizes, Definition of various garments parts & positions,

Anthropometry – Process Of Standardizing The Sizes, Preparation of basic blocks, muslin pattern, commercial pattern, sizes and its understanding, , Spreading parameters, types of spreads, manual and automatic spreading. Introduction to Cutting Machines: Types and functions of cutting machines – straight knife, round knife, band knife, cutting machines – Notches, drills, die cutting machines – Computerized cutting machines –maintenance of cutting machines – common defects in cutting & their remedies.

UNIT III - Sewing Machine

Types of needles – Parts of needles and their function – Needle size - sewing thread – properties of sewing threads – ticket number – fabric sew ability . Seam quality – effect of stitch type on seam quality . Selection of seam and stitch. Federal classification of seam and stitches

Basic parts of sewing machine – Needle – Bobbin case /Bobbin hook, Loopers – Loop spreader – Threading fingers – Throat plate – Take-up devices – Tensioners – Feed dog – Pressure foot for sewing.

Sewing Technology: Feed systems, machinery and equipment, basic sewing machines, like general sewing, over locking, safety stitching, blind stitching, button holes, bar tacking, & button sewing, special sewing machines like three thread overlock with a microprocessor, Sewing problems, slipped stitches, staggered stitches, stitching pucker etc.

UNIT IV - Fusing & Pressing

Fusing Technology: Construction of Fusibles, Fusing process, Fusing machinery, quality control,

Pressing Technology: Classification, components of Pressing, machinery and equipment viz. Hand irons, dry iron, electric steam iron, under pressing, top pressing, scissors press, Carousel machines, Steam dolly, tunnel finishing, controls, handling systems, boiler room.

UNIT V - Trims & Production Technology

Sort note on buttons, zips, underlining, Hooks and ornamental materials, fly, kissing, lap; Button and buttonholes, hooks and eye snaps, Velcro and other accessories.

Garment Finishing and Inspection: Attaching buttons, marking, sewing labels, cleaning, final touch, fitting quality, live models, measurements, viewing the garments, quality standards.

Production Technology: Manual systems, making through, section system, progressive bundle system, straight line system, unit production system, quick response sewing system.

TEXT BOOKS:

1. Gerry Cooklin & Marshall, "Introduction to Clothing Manufacture", 6th Enlarged Edition, Blackwell Publications, USA, 2007.
2. Natalie Bray, "Dress Pattern Designing", Blackwell Publications, USA, 2007.

REFERENCE BOOKS:

1. Peggali - I & Marshall Caverdesh, "The Complete Dress Maker", Textile North Publishers, London ,2004.
2. David .T .T yler, "Materials Management in Clothing Production", Blackwell Publications, USA, 2007.
3. Gerry Cooklin, "Garment T echnology for Fashion Designers", Blackwell Science, 1997.