

Module-I(10 hours)

Importance of fabric structure, Notation of weave, Drafting plan, Peg plan and Denting. Plain Weave and It's Derivative, Twill weaves and its Derivatives, Satin and Sateen weaves, Crepe weave, Honeycomb, Mock leno, Huck-a-back, Bedford Cord, Pique, Cork Screw.

Extra Warp and Extra Weft figuring. Backed Cloth, Double Cloth, Pile fabric (Warp and Weft), and Damask and Brocade fabric design, Double cloth, types of stitches; 3D Fabrics

Module-II (10 hours)

Difference between knitted and woven structure. General classification of Knitting Machine - Flat & Circular. Knit, Tuck & Float Stitches & their uses. Knitting Needles – Latch, beard & compound needles.

Weft knitted structures - Blister jacquard, plush, pile, velour and fleecy fabrics. Directionally oriented warp knitted structures. Classification of braided structure, production techniques, properties and applications.

Module-III (12 hours)

Warp Knitted fabrics and their structure - single bar fabrics, tricot two full set guide bar structure (full tricot, lock knit, reverse lock knit, satin), open work effects (Marquissette, sand fly net, hexagonal net, raschel laces), crepe fabrics.

Tape looms, needle looms, crochet and knitting machines for manufacture of narrow width products; tapes, ribbon, elastic, laces, woven labels – its production techniques, properties and applications

Module-IV (10 hours)

Lining and interlining, fusible and non-fusible interlining-functional requirements-factors influencing fusing-material and machine parameters. Fusing methods-quality assurance in fusing.

Coating – requirements – scope - application methods.

Non woven fabrics – Classification – Production techniques and end uses

Books Recommended:

1. Grosicki Z. J., "Watson's Textile Design and Colour", Vol.1, Woodhead Publications, Cambridge England, 2004
2. Grosicki Z. J., "Watson's Advanced Textile Design and Colour", Vol.II, Butterworths, London, 1989
3. Seyam A. M., "Structural Design of Woven Fabrics, Theory and Practice", Textile Institute, Manchester, 2002.
4. Spencer D.J., "Knitting Technology", III Ed., Textile Institute, Manchester, 2001.
5. Ajaonkar D.B., "Knitting Technology", Universal Publishing Corporation, Mumbai, 1998.