

13TF302 APPAREL PRODUCTION, PLANNING AND CONTROL

Hours Per Week :

L	T	P	C
3	-	-	3

Total Hours :

L	T	P	WA/RA	SSH/HSB	CS	SA	S	BS
45	-	-	10	20	5	-	-	-

Course Description and Objectives:

This course deals with the functions and techniques involved in production, pre-production activities, marker planning and spreading techniques in apparel production. Objective of this course is to impart insight knowledge in planning techniques and control measures used in apparel production.

Course Outcomes:

The student will be able to:

- calculate the capacity and line balancing in cutting, sewing and finishing.
- learn techniques involved in the construction of garment closures to meet customer requirement.

SKILLS:

- ✓ *Improve managerial capacity in the garment production department.*
- ✓ *Prepare the operation bulliten for given style.*
- ✓ *Improve utilization of raw materials.*
- ✓ *Control the lines to get good quality of garment.*

UNIT - 1

L-9

INTRODUCTION: Production - Definition, Terminology, Functions of production department, Duties and responsibilities of a production manager / supervisor. Pre-production activities, Lead time, Product development steps from prototype to production model, Product data management, Understanding and interpretation of specification sheets.

UNIT - 2

L-9

MARKER AND LAY PLANNING: Marker planning - Plain, Striped and checked, Directional, Non directional fabrics, Spreading techniques - One way, Two way, Biased grain; Step lay, Splicing, Marker making, Lay lot planning, Numerical exercises on lay lot planning, shrinkage allowance.

UNIT - 3

L-9

BUNDLE TICKETS AND OPERATION SEQUENCE : Bundle Tickets - Importance and guideline, Sorting and bundling, move ticket, Operation breakdown - T-shirt, Men's full sleeve shirt, Trousers, Jeans, Ladies night dress, Shorts; Machine and attachment details.

UNIT - 4

L-10

PRODUCTION PLANNING AND CONTROL : Capacity calculation - Cutting, Sewing and finishing; Determination of machine requirements For a given target, Allocation of man power and machines, Line balancing - Importance, Techniques and line balancing matrix, Takt Time analysis.

UNIT - 5

L-8

QUALITY IN PRODUCT DEVELOPMENT : Quality Assurance - Fabric, Pattern making, Cutting and garment construction, Inspection procedure - Product development, Components inspection for men's and women's wear.

TEXT BOOKS:

1. A. J. Chuter, "Introduction to Clothing Production Management", Blackwell Science Publishing, 1995.
2. H. Carr, B Latham, "The Technology of Clothing Manufacture", Om Book Service, New Delhi, 1995.

REFERENCE BOOKS:

1. R. E. Glock and G. I. Kunz, "Apparel Manufacturing: Sewn Product Analysis", 4th edition, Pearson Education, New Delhi, 1994, ISBN: 8177580760.
2. J. Solinger, "Apparel Production Handbook", Van Nostrand Reinhold Publications, New York, 1998.

ACTIVITIES:

- *Case study on apparel production planning.*
- *calculation of marker efficiency through mini marker.*
- *Preparation of operation bulliten for given garment style.*
- *Optimising line balancing through hourly adjustment.*
- *Performing takt time analysis.*
- *Inspection of garments and finding A, B & C category faults.*