

# 16TF205 PATTERN ENGINEERING

Hours Per Week :

L	T	P	C
3	-	2	4

Total Hours :

L	T	P	WA/RA	SSH/HSB	CS	SA	S	BS
45	-	30	10	10	-	20	-	-



## Course Description & Objectives:

This course offers concepts of pattern making for a specific garment. It starts with workroom practices that form the basis for garment cutting, making of basic body slopers with dart manipulation, sleeves and collars. The objective of this course is to impart the knowledge and skill of converting designs, sketching into a product.

## Course outcomes:

The student will be able to:

- understand various pattern making tools in the workroom.
- perform the drafting of basic body slopers and dart manipulation.
- understand the pattern drafting for sleeves, collars, yokes and cuffs.
- use these basic the principles and styles of grading for men's and women's garments.

## SKILLS:

- ✓ *Selection of measurements for a given design.*
- ✓ *Design the bodice blocks for skirt, torso and sleeves.*
- ✓ *The dart manipulation for the particular fit.*
- ✓ *Draft standard size block patterns for men, women.*
- ✓ *Grading of shirt, trousers, jacket, waistcoat.*

**ACTIVITIES:**

- *Taking measurements using flat pattern methods.*
- *Design darts using slash and spread, pivotal methods for apparel.*
- *Pattern making for plain, puff and bell types of sleeves.*
- *Pattern making for peter pan, cape roller and sailor collars.*
- *Grading of basic bodice.*

**UNIT - 1****L-10**

**WORKROOM PRACTICES** : Patternmaking tools, Pattern paper, Workroom terms and definitions, Industrial form and pattern production terms; Figure Analysis - Head theory, Seven and a half and eight; Measuring Techniques - Introduction, Measurement charts, Tools required for measuring process, Measuring the form, Pin marking the armhole, Circumference measurement, Horizontal balance line (HBL), Strap measurement, Vertical measurements, Horizontal measurements, Standard measurement chart; Flat pattern methods - Bespoke method and industrial method.

**UNIT - 2****L-8**

**MAKING BASIC BODY SLOPERS (PAPER PATTERNS)** : Bodice blocks, Skirt blocks, Torso blocks and sleeves; Dart Manipulation - Slash and spread, Pivotal methods, Designing with darts, Tuck darts, Pleats, Flares, Gathers and style lines.

**SLEEVES: SET-IN-SLEEVES** : Plain, Puff, Bell, Bishop, Circular and leg-o-mutton; Sleeves combined with bodice, Kimono, Dolman and Raglan.

**UNIT - 3****L-9**

**COLLARS**: Peter pan, Partial roll, Cape collar, Scalloped, Sailor, Square, Full roll convertible, Shawl and Shakespeare collars.

**CUFF**: Shirt cuff, Self-faced cuff, French cuff and contoured cuff.

**UNIT - 4****L-9**

**YOKES** : Preparing patterns for yokes - Partial, Yoke without fullness, Yoke with fullness and yoke supporting or releasing fullness.

**GARMENT DRAFTS** : Basic principles and methodologies used to draft standard size block patterns for men, Women, Namely for shirts, Trousers, Skirts, Blouses, Nightwear, Jackets and special dresses, etc.

**UNIT - 5****L-9**

**PRINCIPLES OF GRADING** : Master and basic grades - Basic back, Basic front, Basic sleeve, Basic collar, Basic cuff and basic facing; Styles of Grading - Men's size chart, Grading of shirt, Trousers, jacket, Waistcoat, Displacement of bust dart to side seam, Armhole and neck, Women's size chart, Multi-track grading.

## LABORATORY EXPERIMENTS

### LIST OF EXPERIMENTS

Total hours: 30

Preparation of patterns for making of

1. Baba suit
2. Baby frock
3. Round Neck T- Shirt
4. Romper
5. Salwar and Kameez
6. Blouse
7. Skirt and Top
8. Brassier and Panties
9. Nighty
10. Men's Shorts
11. Men's Formal Shirts
12. Men's Formal Trousers
13. Jeans

### TEXT BOOKS:

1. J Helen Armstrong, "Pattern Making for Fashion Designers" 4<sup>th</sup> edition, Prentice-Hall, New Jersey, 2006
2. C Schaeffer, "The Complete Book of Sewing Shortcuts", Sterling Publishing (NY), 1981.

### REFERENCE BOOK:

1. G. Cooklin, "Master Patterns and Grading for Women's Outsize", Blackwell Scientific Publications, 1995.