

Bachelors in Arts with Community Science
Category-V

**DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-FAS 3-HSC:
PATTERN MAKING**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Pattern Making	4	2	0	2	Class XII	NIL

Learning Objectives

- To introduce fundamental concepts and techniques of pattern making and garment construction.
- To develop understanding of fabric selection, preparation, and layout planning for garment production.
- To enhance skills in dart manipulation, fit evaluation, and pattern correction.
- To familiarise students with draping techniques and the role of CAD in pattern development.
- To develop practical skills in developing patterns of garment components and style variations.

Learning Outcomes

The students would be able to:

- Draft basic bodice, sleeve, and skirt blocks using body measurements
- Differentiate between drafting, flat pattern making, and draping methods of pattern development.
- Interpret pattern markings, symbols, and types of paper patterns used in garment production.
- Select suitable fabrics and calculate material requirements for garment construction.
- Apply correct procedures for fabric preparation, pattern layout, marking, cutting, and sewing.
- Manipulate darts to create design variations and style lines.
- Evaluate garment fit, identify fitting problems, and apply appropriate pattern corrections.
- Develop pattern design variations in skirts, sleeves, and collars.
- Describe basic draping technique and explain the application of CAD in garment design and pattern development.

THEORY
(Credits 2; Hours 30)

UNIT I: Fundamentals of Pattern Making

8 Hours

This unit introduces basic pattern-making concepts and techniques

- Bodice block and Patterns
- Methods of pattern development: Drafting, Flat pattern making, Draping
- Types of paper pattern - Commercial pattern, Graded pattern, Production pattern
- Pattern information and marking symbols
- Common tools of measuring and flat pattern making

UNIT II: Design Development

8 Hours

This unit focuses on creative pattern transformation through dart manipulation techniques, enabling students to convert basic blocks into innovative garment designs.

- Definition and purpose of Dart manipulation
- Principles of Dart Manipulation
- Methods of Dart Manipulation - Slash and Spread and Pivot Transfer Method
- Types of darts and dart equivalents
- Developing design variations from a basic bodice block

UNIT III: Fabric Preparation and Garment Construction Steps

7 Hours

This unit focuses on fabric selection and preparation for garment construction, and systematic steps in clothing construction including layout planning for various fabric types.

- Fabric Selection and requirement estimation for Garment Construction
- Preparatory steps - preshrinking, straightening and truing
- Pattern Layout - general guidelines
- Basic layouts- lengthwise, partial lengthwise, crosswise, double fold, open, combination fold
- Layouts for special fabrics – napped, border print, checks and stripes
- Tools and processes – pinning, marking, cutting and sewing

UNIT IV: Fit and CAD

7 Hours

This unit focuses on fit evaluation, and technological applications in garment design

- Elements of Fit, Common fitting problems and pattern correction
- Introduction to the role of Computer Aided Designing (CAD): 2D and 3D applications of CAD software in Garment designing and pattern development.

PRACTICAL (Credits 2; Hours 60)

1. Child's Basic Bodice
2. Child's Sleeve Block
3. Adult women's bodice block
4. Adult sleeve block
5. Adult skirt block
6. Developing design variations in adult skirt: A-line, flared skirt wrap-around, skirt with yoke
7. Patterns of style variation of Garment components
 - Neckline
 - Sleeve
 - Collar

- Placket
- Pocket
- 8. Dart manipulation
 - Single and double dart series
 - Style lines
 - Yokes
 - Dart equivalents

Essential Readings

UNIT I

This unit introduces the fundamentals of pattern making, including basic blocks, pattern development methods, types of patterns, symbols, markings, and essential tools.

- **Aldrich, W.** (2008). *Metric Pattern Cutting for Women's Wear*. Wiley-Blackwell.
- **Armstrong, H. J.** (2025). *Pattern Making for Fashion Design*. 5th Edition. Harper Collins.
- **MacDonald, N. M.** (2010). *Principles of Flat-Pattern Design*. Fairchild Books.

UNIT II

This unit covers creative pattern transformation and style development, including dart manipulation, style lines, yokes, and design variations in garment components.

- **Aldrich, W.** (2008). *Metric Pattern Cutting for Women's Wear*. Wiley-Blackwell.
- **Armstrong, H. J.** (2025). *Pattern Making for Fashion Design*. 5th Edition. Harper Collins.
- **MacDonald, N. M.** (2010). *Principles of Flat-Pattern Design*. Fairchild Books.

UNIT III

This unit covers fabric selection and preparation, pattern layout, and essential garment construction processes, emphasizing precision, efficiency, and quality control.

- **Brown, P., & Rice, J.** (2014). *Ready to Wear Apparel Analysis*. Pearson Education.
- **Mansfield, E. A., & Lucas, E. L.** (1953). *Clothing Construction*.
- **Mohan, R., Sareen, S., & Gupta, N. (Eds.).** (2023). *Fundamentals of Apparel Design & Construction: Sewing Tools and Techniques*. Indu Book Services.

UNIT IV

This unit covers garment fit, pattern correction, and the application of 2D and 3D CAD technologies in pattern development and garment visualization.

- **Liechty, E. G., Potterberg, D. N., & Rasband, J. A.** (2010). *Fitting and Pattern Alteration: A Multimethod Approach*. Fairchild Publications.
- **Stott, M.** (2012). *Pattern cutting for clothing using CAD: how to use Lectra Modaris pattern cutting software*. Elsevier.

Suggested Readings

- **Dunham, G. R.** (2021). *The Fitting Book: Make Sewing Pattern Alterations and Achieve the Perfect Fit You Desire*. Gina Renee Designs.
- **Azad, N.** (2019). *Sewing Technology*. Neelkanth Publishers.
- **Pepin, H.** (1947). *Modern Pattern Design*. Funk & Wagnalls.
- **Reader's Digest (Ed.).** (2002). *New Complete Guide to Sewing*. Reader's Digest Association.

- **TNT Educational Series.** (n.d.). *Mastering CAD and portfolio skills for fashion design* (TNT Educational Series, Book 1)

Note: Examination scheme and mode shall be as prescribed by the Examination branch, University of Delhi, from time to time

**Bachelors in Arts with With Community Science
Category-V**

**DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-FAS-5-HSC:
TEXTILE SCIENCE CONCEPTS**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Textile Science Concepts	4	3	0	1	Class XII	NIL

Learning Objectives

To provide learners with knowledge of the production, properties and uses of textile fibres and yarns, along with an understanding of various fabric production techniques and their properties.

Learning Outcomes

The students would be able to:

- Classify textile fibres based on length and origin.
- Compare and select fabrics for different end uses based on their properties.
- Describe the properties of textile yarns based on their characteristics.
- Explain the basic parts and working principles of a loom used in fabric weaving.
- Differentiate between basic and fancy weaves such as plain, twill, satin, dobby, jacquard, pile, leno and surface figure weaves.
- Describe the structure, characteristics and uses of knitted fabrics.
- Analyse the reasons for fibre blending and identify the properties of commonly used blended fabrics.
- Explain the types, production methods and properties of non-woven fabrics.
- Compare different fabric construction techniques in relation to their performance and end-use applications.
- Identify and analyse textile materials by recognising fibres, yarns, fabric properties and weave structures using appropriate testing and examination methods.

**THEORY
(Credits 3; Hours 45)**

UNIT I: Textile Fibres – Properties and Identification

15 Hours

This unit provides an understanding of textile fibres, focusing on their structure, properties, identification methods, and end-use applications.