

Suggested Readings

- Kunz, G., & Glock, R. (2004). *Apparel manufacturing: Sewn product analysis (4th ed.)*. Pearson.
- Bubonia, J. E. (2017). *Apparel production terms and processes (2nd ed.)*. Fairchild Books.
- Seivewright, S., & Sorger, R. (2016). *Research and design for fashion*. Fairchild Books.
- Tain, L. (2018). *Portfolio presentation for fashion designers*. Fairchild Books.

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 10-HSC: GARMENT PRODUCTION AND QUALITY MANAGEMENT

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		
Garment Production and Quality Management	4	3	1	0	Class XII	NIL

Learning Objectives

- To provide learners with an understanding of quality concepts and quality management practices in the apparel industry.
- To develop knowledge of in-production, post-production, and inspection processes in garment manufacturing.
- To familiarise learners with sourcing strategies, production systems, and equipment used in apparel manufacturing.
- To enable learners to understand the workflow from fabric sourcing and cutting to finishing, folding, packing, and final garment inspection.
- To introduce principles of production efficiency, including time and motion studies, and their role in productivity improvement.

Learning Outcomes

The students would be able to:

- Explain the concepts of quality, dimensions of quality, and components of quality management in garment production.
- Identify and apply relevant quality standards and specifications in the apparel industry.
- Describe the steps and strategies involved in the sourcing of fabrics and trims for garment production.
- Explain the role of Marker making, Marker Modes, Marker efficiency in garment production.

- Explain the processes involved in spreading, layout and cutting
- Identify and describe the function of general and specialised sewing machines, types of machine beds and related seams and stitches
- Explain the processes used in finishing and packing department.
- Compare and evaluate the alternative systems of production.
- Explain the importance of time and motion studies to improve productivity in garment production.

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

UNIT I: Introduction to Quality Management

10 Hours

This unit provides an understanding of the concepts relating to quality and quality management in the apparel industry. It also aims to apprise the learners of the various quality standards and specifications applicable to the garment industry.

- Quality and Quality Management – Definition and importance, Dimensions of Quality, Components of Quality management – Quality Planning, Quality Assurance, Quality Control
- Overview of Quality Standards and specifications

UNIT II: Sourcing and In-production processes in Garment manufacturing

15 Hours

This unit provides an understanding of the various equipment and processes used in marker making, spreading, layout and cutting room.

- Sourcing department – Role and functions, Steps and strategies of sourcing
- Fabric and Accessories Inspection - 4 point grading system, Physical tests
- Marker making, Marker Modes, Marker efficiency
- Spreading – Spreading modes and machines, Fabric (Symmetrical and asymmetrical)
- Cutting Room – Cut order planning, Cutting equipment, ticketing and bundling
- Sewing Room – General and specialised sewing machines, Seams and stitches
- Inline Quality Inspection

UNIT III: Post-production processes in Garment manufacturing

10 Hours

- Finishing Department – functions, finishing equipment, pressing, cleaning, stain removal
- Folding and Packing department – Types of folds, folding equipment, packing types and material
- Steps in Post-Production Garment Inspection and testing, Sampling Plans, AQL

UNIT IV: Production Systems and Productivity

10 Hours

This unit introduces the concept of Production systems and time and motion studies in garment production.

- Production systems: key components
 - Whole Garment Production System: Make through system, Section or process system, Modular Production System
 - Assembly Line System: Bundle system, Straight line, Unit production system
- Role of time and motion study in the productivity of garment production.

TUTORIALS

(Credits 1; Hours 15)

1. Discussion on the dimensions of quality.
2. Analysis of garment labels to identify quality specifications
3. Compare two similar garments from different brands and evaluate quality parameters such as fabric, stitching and finishing
4. Research on international or national quality standards used in the apparel industry.
5. Calculation of marker efficiency using a given fabric layout.
6. Prepare a comprehensive checklist for post-production garment inspection, including finishing, measurement, and packaging standards.
7. Visit a garment manufacturing unit or export house to observe departments, workflow, machinery, and quality practices.
8. Any other academic work that demonstrates the student's ability to apply the concepts learnt in the subject.
9. Evaluation and feedback by the teacher.

Essential Readings

UNIT I

This unit introduces learners to the fundamental concepts of quality and quality management in the apparel industry. It emphasizes the importance of quality for customer satisfaction and organizational efficiency and covers the components of quality management. Learners will also be familiarized with various quality standards and specifications relevant to garments.

- **Mehta, P. V.** (2012). *Quality management handbook for the apparel industry*. New Age International Pvt Ltd.
- **Purushothama, B.** (2021). *Handbook of managing apparel production and quality*. Woodhead Publishing India Pvt Ltd.

UNIT II

This unit explores the processes and equipment used in garment production from sourcing to sewing. It emphasizes how sourcing strategies, fabric inspection, and in-production processes contribute to efficiency and quality in garment manufacturing.

- **Cooklin, G., Hayes, S. G., & McLoughlin, J.** (2006). *Introduction to clothing manufacture*. Wiley-Blackwell.
- **Mehta, P. V.** (2012). *Quality management handbook for the apparel industry*. New Age International Pvt Ltd.
- **Gokarneshan, N.** (2019). *Garment manufacturing technology*. Abhishek Publications.
- **Karthik, T.** (2016). *Apparel manufacturing technology*. Taylor & Francis.

UNIT III

This unit focuses on the processes after sewing, covering finishing, folding, packing, and inspection. Learners will understand how post-production quality control ensures garments meet standards before delivery.

- **Cooklin, G., Hayes, S. G., & McLoughlin, J.** (2006). *Introduction to clothing manufacture*. Wiley-Blackwell.
- **Purushothama, B.** (2021). *Handbook of managing apparel production and quality*. Woodhead Publishing India Pvt Ltd.
- **Gokarneshan, N.** (2019). *Garment manufacturing technology*. Abhishek Publications.
- **Karthik, T.** (2016). *Apparel manufacturing technology*. Taylor & Francis.

UNIT IV

This unit introduces learners to different garment production systems and the role of time and motion studies in improving productivity. It emphasizes efficiency and workflow optimization in manufacturing.

- **Cooklin, G., Hayes, S. G., & McLoughlin, J.** (2006). *Introduction to clothing manufacture*. Wiley-Blackwell.
- **Shukla, A., & Tyagi, D.** (2023). *Productivity improvement in garment manufacturing process*. LAP Lambert Academic Publishing.

Suggested Readings

- **Bubonia, J. E.** (2014). *Apparel quality: A guide to evaluating sewn products*. Fairchild Books.
- **Eiri Staff.** (2007). *Handbook of garments manufacturing technology*. Educa Books.
- **Ha-Brookshire, J.** (2017). *Global sourcing in the textile and apparel industry*. Bloomsbury Publishing Plc.
- **Lee, J., & Steen, C.** (2019). *Technical sourcebook for apparel designers*. Bloomsbury.
- **Mehta, P., & Bharadwaj,** (1998). *Managing quality in apparel industry*. New Age Publishers.
- **Sarkar, P.** (2015). *Garment manufacturing: Processes, practices and technology*. Online Clothing Study.

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Bachelors in Arts with With Community Science Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE – DSC-FAS 12-HSC: TEXTILES FOR HOME

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		
Textiles for Home	4	3	1	0	Class XII	NIL

Learning Objectives

- To provide an overview of the home textiles sector in India.
- To develop understanding of various categories and characteristics of household linen
- To familiarise students with different types and production methods of floor coverings.
- To introduce performance requirements, finishes, quality standards, labelling, and safety regulations in home textiles.

Learning Outcomes

The students would be able to:

- Define and classify home textiles and made-ups.
- Describe the structure and emerging market trends of the Indian home textile sector