



Course Syllabus
Gyanmanjari Institute of Design
Semester-4

Subject: Production, Planning, Management & Control - DDEFN14214

Type of course: Major(core)

Prerequisite: Basic understanding of garment manufacturing processes, fabric knowledge, tools, and techniques used in apparel construction.

Rationale: This subject provides an understanding of the core functions of Production, Planning, Management & Control within the apparel and fashion industry. Students will learn how workflows, resource planning, quality control, and industrial standards are applied to organize and execute smooth production processes from design to final garment. The course prepares learners for industrial environments through planning, scheduling, cost management, and effective production oversight.

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks					Total Marks
CI	T	P		Theory Marks		Practical Marks		CA	
			ESE	MSE	V	P	ALA		
2	0	0	2	60	40	00	00	50	150

Legends: CI-Classroom Instructions; T – Tutorial; P - Practical; C – Credit; ESE - End Semester Examination; MSE- Mid Semester Examination; V – Viva; CA - Continuous Assessment; ALA- Active Learning Activities.

Course content

Sr. no.	Course content
1	Unit –1 THE CLOTHING INDUSTRY 1.1 Structure of the Clothing Industry. 1.2 Sectors of the Clothing Industry. 1.3 Product Types and Organization.



2	Unit -2 THE ORGANISATION OF A CLOTHING FACTORY. 2.1 Principles of Management. 2.2 Design Department. 2.3 Marketing Department. 2.4 Finance Department. 2.5 Purchasing Department. 2.6 Production Department. 2.7 Operations Department.
3	Unit- 3 MANUFACTURING TECHNOLOGY 3.1 Cutting Room. 3.2 Fusing Technology. 3.3 Sewing Technology. 3.4 Pressing Technology. 3.5 Production Technology. 3.6 Warehousing.
4	Unit- 4 ENGINEERING AND QUALITY CONTROL. 4.1 Production Engineering. 4.2 Quality Systems and Methods.

Continuous Assessment:

Sr. No.	Active Learning Activities	Marks
1	Industrial Chart – Create a production flow chart with garment stages and upload PDF on portal	10
2	Production Sheet – Prepare material requirement sheet for one garment	10
3	Case Study – Study any garment manufacturing unit and prepare a report	10
4	Costing Sheet – Prepare costing for one selected garment	10
5	Attendance	10
	Total	30



Suggested Specification table with Marks (Theory):60

Distribution of Theory Marks (Revised Bloom's Taxonomy)						
Level	Remembrance (R)	Understanding (U)	Application (A)	Analyze (N)	Evaluae (E)	Create (C)
Weightage	25%	35%	20%	20%	NA	NA

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

After learning the course, the students should be able to:	
CO1	Understand the role and functions of production planning in the apparel industry..
CO2	Apply production systems and workflows in garment manufacturing.
CO3	Analyze and maintain material, inventory, and quality control.
CO4	Prepare garment costing sheets and evaluate productivity.

Instructional Method:

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

Reference Books:

1. **Garment Manufacturing Technology"** – Rajkishore Nayak & Rajiv Padhye
2. **Production Planning and Control"** – K.C. Jain & L.N. Aggarwal
3. **Apparel Manufacturing: Sewn Product Analysis"** – Grace I. Kunz
4. **Managing Quality in the Apparel Industry"** – Pradip V. Mehta

