Three-year Diploma Curriculum

As Per

National EducationPolicy 2020
(3rd Semester)

Department of Skill Development
UT of Jammu & Kashmir

First of its kind Exercise undertaken in the country to develop Curriculum in accordance with NSQF Guidelines and as per NEP-2020 for AICTE approved Three year Diploma Courses in UT of Jammu & Kashmir.

CURRICULUM
FOR
THIRD SEMESTER
OF
THREE-YEAR DIPLOMA COURSE
IN
GARMENT TECHNOLOGY

STUDY SCHEME THIRD SEMESTER

S.No	Code No.	Subjects	Study Scheme Hrs/Week			Credits (C)		Total Credits
			L	T	P	L	P	L+P
3.1	GTPC301	Garment Design- I	-	-	4	-	2	2
3.2	GTPC302	Pattern Making	-	-	6	-	3	3
3.3	GTPC303	CAD in Garment Technology	-	1	6	-	3	4
3.4	GTPC304	Garment Construction-III	2	-	-	2	-	2
3.5	GTPC305	Garment Construction-III Lab	-	-	6	-	3	3
3.6	GTPC306	Cutting Room Techniques	2	-	-	2	-	2
3.7	GTPC307	Cutting Room Techniques Lab	-	-	2	-	1	1
3.8	GTPC308	Industrial Garment Machinery	3	-	-	3	-	3
3.9	GTPC309	Industrial Garment Machinery Lab	-	-	2	-	1	1
		TOTAL	**7**	**1**	**26**	**7**	**13**	**21**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE : **GTPC301**	COURSE TITLE : **GARMENT DESIGN-I**
SEMESTER: **3RD**	CREDITS : **2**
PERIODS PER WEEK: **4 (L:0 T: 0 P: 4)**	

COURSE OBJECTIVE:

The students should be able to design garments and accessories for different age groups, and occasions with proper selection of fabrics. After going through this subject, the student will be able to design garments appropriately to customers satisfaction and need.

COURSE CONTENT:

Unit 1 Sketching of accessories

Kids- Shoes, Bags, Hats
Adults- Ladies footwear, ladies bags, Jewellery

Unit 2 Flat sketching

Sketching both (Casual and formal) in various colour ways, textures, replicas, enlargement, and swatches:

a) Child wear- Baby frock ((2 sketches)
b) Top and Skirts (2 sketches)
c) Jumpsuits (2 sketches)
d) Night Suit (2 sketches)
e) Jackets and Trousers (2 sketches)

Unit 3 Make a Mood board on a given theme with all accessories

Unit 4 Sketch a 10 ½ head fashion figure and render different textures (any five)

Note:-The students should do a market survey for the fabrics, colours and textures available in the market. They are required to attach suitable fabric swatches on the design sheets

RECOMMENDED BOOKS

1. Design for the Real World: Human Ecology and Social Change by Papanek
2. Repeat Patterns: A Manual for Designers, Artists and Architects by Phillips and Bunce
3. Textiles Designs 200 Years of Patterns for Printed Fabrics by Meller and Elffers

SUGGESTED DISTRIBUTION

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	20	30
2	20	30
3	15	20
4.	9	20
Total	**64**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE **: GTPC302**	COURSE TITLE : **PATTERN MAKING**
SEMESTER :**3RD**	CREDITS: **3**
PERIODS PER WEEK: **6(L: 0 T: 0 P: 6)**	

COURSE OBJECTIVES:

The students are supposed to know how to adapt basic blocks to various garment designs, and layouts. Thus the subject deals with variations of pattern and styling of garments. After going through this subject, the students will be able to draft various components of the garments and express design ideas by a three dimensional process of pattern making.

COURSE CONTENT:

Unit 1 Draft the basic child trouser block

Unit 2 **Design, draft and adapt (child's wear)**
Night suit with front opening (Special feature:-designer- sleeve, Collar, yoke, Pockets, gathers etc)

Unit 3 **Design, draft and adapt**
Choli Blouse (Special features: - Darts with piping (Layout of Saree & Choli blouse)

Unit 4 Drafting of women Trouser basic block and its variations

Unit 5 Drafting of women basic skirt block

Unit 6 Design, draft and adapt an A-Line Princess Kameez with Palazzo (Make Layout)

RECOMMENDED BOOKS

1. Fashion Drawing Designs; Magazine of Thailand
2. Pattern Designs for Haute Couture Volume – I
3. Fashion Drawing – The Basic Principles by Anne Allen and Julion Seaman
4. Latest Fashion Style by Winter Hiver
5. Jasmine's "New Look, On Indian Fashion Scene"
6. Lifestyles: Fashion Styles by Katheryn Samuel
7. Spring and Summer Collection; Tokyo, New York
8. Draping for Fashion Design by Jaffe, Hilde
9. Fashion from Concept to Consumer by Stephens

TIME AND MARKS DISTRIBUTION

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	15	20
2	15	20
3	12	10
4	10	10
5	12	10
6	16	15
7	16	15
TOTAL	**96**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE :**GTCP303**	COURSE TITLE : **CAD IN GARMENT TECHNOLOGY**
SEMESTER: **3RD**	CREDITS : **4**
PERIODS PER WEEK: **7 (L: 0 T: 1 P:6)**	

COURSE OBJECTIVES:

The term CAD has found its way into all major disciplines that have got anything to do with designing or drafting techniques. The objective of the subject is to expose professionals and to meet the needs of the users by complementing their knowledge, skills and ability, creativity in the field of garment technology and their application in the industry.

COURSE CONTENT:

Unit 1 Introduction to Corel Draw and Adobe Photoshop

Unit 2 Create a composition of geometrical shapes in "8x8" Block

Unit 3 Design traditional motifs, a contemporary motif, Nursery prints etc.

Unit 4 Make a power point presentation of at least 10 slides selecting your own topic

Note:- Visit Design Studios in Export Houses and Industry to understand the use of these Software by designers.

RECOMMENDED BOOKS

1. Literature from the supplier of each software can be consulted
2. Corel Draw 12 – BPB Publication (latest version)
3. Adobe Photoshop 5.5 - BPB Publication (latest version)

MARKS AND TIME DISTRIBUTION

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	30	30
2	30	30
3	20	20
4.	16	20
Total	**96**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE : **GTPC304**	COURSE TITLE : **GARMENT CONSTRUCTION III**
SEMESTER: **3RD**	CREDITS : **2**
PERIODS PER WEEK: **2 (L: 2 T: 0 P: 0)**	

COURSE OBJECTIVES:

The diploma holders in garment technology are supposed to fabricate the garments for kids; as per the layouts and specifications. Hence this subject has been included in the curriculum in order to develop such competencies.

COURSE CONTENT:

Unit 1: Preparation of fabric for cutting

1.1 Straightening the fabric
1.2 Shrinking the fabric
1.3 Ironing/pressing the fabric

Unit 2: Sequence of cutting

2.1 Laying out the pattern pieces
2.2 marking and transferring the pattern details,
2.3 cutting
2.4 Selection and Handling of special fabrics while cutting and stitching

Unit 3: Construction details:

3.1 Seams and seam finishes
3.2 Fullness and its types – Gathers/ Pleats
3.3 Shirring, Smocking
3.4 Plackets and fasteners
3.5 Hem finishes
3.6 Lining/interlining
3.7 Facing/interfacings

Unit 4: Fitting

4.1 Fitting
4.2 Principles of good fitting
4.3 Sequence of fitting
4.4 Alterations to achieve a good fit

COURSE OUTCOME:

- Demonstrate proper fabric preparation techniques, including straightening, shrinking, and ironing/pressing, to ensure accurate and clean cutting.
- Efficiently lay out pattern pieces, mark and transfer pattern details, and execute precise cutting for garment construction.

- Apply various construction details such as seams, seam finishes, fullness techniques, plackets, fasteners, hem finishes, lining/interlining, and facings/interfacings to create well-constructed garments.
- Understand the principles of good fitting and apply appropriate alterations to achieve a well-fitted garment.
- Develop essential skills in handling special fabrics during cutting and stitching processes to ensure successful garment construction.

RECOMMENDED BOOKS:

1. Pattern Making for Fashion design by Amstrong, Vikas Publishing House Pvt. Ltd. Delhi
2. Clothing Construction by Doongaji, Raj Parkashan, New Delhi
3. System of Cutting by Zarapkar, Navneet Publications (India) Ltd.
4. Clothing Construction by Evelyn A Mansfield, Hougutan Miffin Co., Boston
5. Creative Sewing by Allynie Bane; McGraw Hill Book Co., Inc., New York
6. How You Look and Dress by Byrta Carson; McGraw Hill Book Co., Inc., New York
7. Complete Guide to Sewing by Reader's Digest, Pitman Publishing Corpn. New York

SUGGESTED DISTRIBUTION OF TIME AND MARKS

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	06	20
2	10	30
3	10	30
4	06	20
Total	**32**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE : **GTPC305**	COURSE TITLE **: GARMENT CONSTRUCTION-III Lab**
SEMESTER :**3RD**	CREDITS: **3**
PERIODS PER WEEK: **6 (L:0 T:0 P:6)**	

COURSE OBJECTIVES:

The diploma holders in garment technology are supposed to fabricate the garments as per the layouts and specifications. Hence this subject has been included in the curriculum in order to develop such competencies.

LIST OF PRACTICALS:

1. Fabrication of:
    - Choli Blouse (Special features: - Darts, Puff or cap sleeve, etc
2. Fabricate a simple women trouser.
3. Fabrication of Night suit (child's wear)
    - Special feature:-Collar, yoke, gathers Pocket
4. Fabrication of Women's pleated skirt
5. Fabrication of Boy's school uniform – Shirt and shorts
6. Fabrication of A-Line Princess Kameez with Palazzo.

RECOMMENDED BOOKS

1. Pattern Making for Fashion design by Amstrong, Vikas Publishing House Pvt. Ltd. Delhi
2. Clothing Construction by Doongaji, Raj Parkashan, New Delhi
3. System of Cutting by Zarapkar, Navneet Publications (India) Ltd.
4. Clothing Construction by Evelyn A Mansfield, Hougutan Miffin Co., Boston
5. Creative Sewing by Allynie Bane; McGraw Hill Book Co., Inc., New York
6. How You Look and Dress by Byrta Carson; McGraw Hill Book Co., Inc., New York
7. Complete Guide to Sewing by Reader's Digest, Pitman Publishing Corpn. New York

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
Course Code : **GTPC306**	Course Title : **Cutting Room Techniques**
Semester: **3rd**	Credits : **2**
Periods per week: **2(L: 2, T: 0, P: 0)**	

COURSE OBJECTIVE:

This subject informs the students about all the techniques followed in the cutting room, i.e. spreading, cutting and marker making. After going through this subject, they will be able to plan and schedule all the operations of cutting room

COURSE CONTENT:

Unit 1: Fabric consumption estimation

1.1 How to plan a marker on basis of
1.2 No. of pieces in a garment
1.3 Number of sizes
1.4 Width of fabric
1.5 Nature/Hand of fabric
1.6 Design/orientation of fabric
1.7 Calculation of marker consumption
1.8 Factors leading to maximum utilization of fabric

Unit 2: Spreading Techniques

2.1 Mode of fabric spreading
2.2 Spreading Equipment
2.3 Manual spreading techniques
2.4 Automatic spreading techniques

Unit 3: Cutting Equipments

Different types of cutting Equipments

Unit 4: Bundling/Ticketing

Unit 5: Fusing techniques

Unit 6: Factors leading to maximum utilization of fabric

6.1 Fabric defects

Course Outcome:

On completion of this course the student shall be able to:

- To do Estimation & consumption of fabric.
- Know Different techniques of spreading.
- Use of different cutting equipments.

- Process of Bundling and Ticketing.
- Use of different Fusing techniques.
- Utilization, defects, and rectification of fabric defects.

RCOMMENDED BOOKS

1. Industrial Machinery – Solinger, Oxford University Press, USA
2. Managing Quality – PV Mehta and SK Bhardwaj, New Age Publisher, Delhi
3. Introduction to Clothing Technology – Harold Carr & Latham, John Wiley & Sons, New York
4. Complete guide to sewing by Reader's Digest, Pitman Publishing Corporation, New York

SUGGESTED DISTRIBUTION OF MARKS

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	8	25
2	8	25
3	7	20
4	3	10
5	3	10
6	3	10
Total	**32**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE : **GTPC307**	COURSE TITLE : **CUTTING ROOM TECHNIQUES Lab**
SEMESTER: **3RD**	CREDITS : **1**
PERIODS PER WEEK: **2 (L: 0 T: 0 P: 2)**	

COURSE OBJECTIVE:

This subject informs the students about all the techniques followed in the cutting room, i.e. spreading, cutting and marker making. After going through this subject, they will be able to plan and schedule all the operations of cutting room

LIST OF PRACTICALS:

1. Estimation of materials using different sizes and fabric width
2. Developing miniature patterns for various widths of fabric
3. Placement of pattern on paper (manual marker)
4. Identifying different techniques for various types of fabrics (knit, woven, checks, stripes etc(Mode of fabric spreading)
5. Demonstration of spreading. Practice with spreading equipment (Demonstration of CAM)
6. Practice on cutting machine and maintenance of cutting machine (Circular knife cutter & vertical knife cutter, auto cut, water jet, laser)
7. Demonstration of Fusing Techniques
8. Demonstration of cutting defects

RECOMMENDED BOOKS

1. Industrial Machinery – Solinger, Oxford University Press, USA
2. Managing Quality – PV Mehta and SK Bhardwaj, New Age Publisher, Delhi
3. Introduction to Clothing Technology – Harold Carr & Latham, John Wiley & Sons, New York
4. Complete guide to sewing by Reader's Digest, Pitman Publishing Corporation, New York

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE : **GTPC308**	COURSE TITLE : **INDUSTRIAL GARMENT MACHINARY (THEORY)**
SEMESTER: **3RD**	CREDITS : **3**
PERIODS PER WEEK: **3(L: 3 T: 0 P: 0)**	

COURSE OBJECTIVE:

The students are expected to know various types of machinery and equipment used in manufacturing of garments. They should be able to operate and maintain the machinery and rectify the common defects. The subject intends to develop such skills in the students

COURSE CONTENT:

Unit 1 The main types of stitching machinery and their uses in garment assembly (industry setup)

Unit 2 General Purpose of sewing machines:- working of sewing machines- Hand operated, treadle operated, electric operated.
Functions of different components of sewing machinery

Unit 3 Attachments: Tuckers, hemmer, seam-guide, binders, button hole, folders and trimmers, Needles/Feed Dogs/Presser Foot

Unit 4 Different types of garment manufacturing machines

Unit 5 Necessity of preventive, periodic and corrective maintenance of different types of sewing machines

Unit 6 Types of lubricating oil used, maintenance schedule for lubricating the machines

Unit 7 Fedral stitch standards – various stitch types as per international standards – **Class 100, 300, 400, 500, 600**- Seam Types

COURSE OUTCOME:

On completion of this course the student shall be able to:

- Identify and describe the main types of stitching machinery used in garment assembly in an industrial setup.
- Understand the working of hand-operated, treadle-operated, and electric-operated sewing machines and their general purpose.
- Explain the functions of sewing machinery components and various attachments used in garment manufacturing.
- Recognize different types of garment manufacturing machines and their applications.
- Appreciate the importance of preventive, periodic, and corrective maintenance for sewing machines.
- Demonstrate proper lubrication techniques using suitable oils to ensure machine longevity.

- Comprehend Federal Stitch Standards and identify various stitch types and seam types as per international standards.

RECOMMENDED BOOKS

1. Industrial Machinery by Solinger, Solinger, Oxford University Press, USA
2. Introduction to clothing Technology – Harold Carr and Latham, John Wiley & Sons, New York
3. Managing Quality - PV Mehta & SK Bhardwaj, New Age Publishers, Delhi

SUGGESTED DISTRIBUTION OF TIME AND MARKS

Unit No.	Time Allotted (Hrs)	Marks Allotted (%)
1	06	10
2	10	25
3	10	15
4	10	20
5	04	10
6	04	10
7	04	10
TOTAL	**48**	**100**

PROGRAM: THREE YEARS DIPLOMA PROGRAM IN GARMENT TECHNOLOGY	
COURSE CODE :-GTPE309	**COURSE TITLE : INDUSTRIAL GARMENT MACHINARY Lab**
SEMESTER: 3RD	**CREDITS : 1**
PERIODS PER WEEK: 2(L: 0 T: 0 P:2)	

COURSE OBJECTIVE:

The students are expected to know various types of machinery and equipment used in manufacturing of garments. They should be able to operate and maintain the machinery and rectify the common defects. The subject intends to develop such skills in the students

LIST OF PRACTICALS:

1 The main types of stitching machinery and their uses in garment assembly (industry setup) SNLS, DNLS, FOA, BARTACK, Overlock (3th/5th), Button Sewing, Collar Turning, Chain Stitch
2 Dismantling and assembly of a hand operated sewing machine
3 Usage of various components of machines with respect to various operations
4 Dismantling and assembly of a treadle operated sewing machine with all attachments
5 Collection of pictures and samples of Needles/Feed Dogs/Presser Foot
6 Demonstration of parts of following machines or visit to a garment manufacturing unit to study different types of garment manufacturing machines
7 Making of following samples:
- Lock stitch machine (SNLS)
- Chain stitch machine (SNCS/ DNCS)
- Over lock machine (O/L)
- Button hole machine(B/H)
- Zig-zag machine
- Double needle lockstitch machine (DNLS)
- Bar-tacking machine
- Blind stitch machine
- Flat lock machine (F/L)
- Feed off the Arm

8 Cleaning and lubricating of different types of sewing machines
9 Demonstrate various types of stitches in the laboratory or visit to a garment manufacturing unit to show various types of stitches

INSTRUCTIONAL STRATEGY

The students should be given exercises on fault finding and repairing the defective machines by demonstration so that they are able to maintain the garment machinery in proper working condition

RECOMMENDED BOOKS

1. Industrial Machinery by Solinger, Solinger, Oxford University Press, USA
2. Introduction to clothing Technology – Harold Carr and Latham, John Wiley & Sons, New York
3. Managing Quality - PV Mehta & SK Bhardwaj, New Age Publishers, Delhi