

**SYLLABUS OF SEMESTER SYSTEM  
FOR THE TRADE OF**

# **Sewing Technology**

**Under**

**Craftsmen Training Scheme (CTS)  
(One year/Two Semesters)**

**Redesigned in  
2014**

By  
**Government of India  
Ministry of Labour & Employment (DGE&T)**

## GENERAL INFORMATION

- |  |  |
|--|--|
| <b>1. Name of the Trade</b>              | <b>: Sewing Technology</b>   |
| <b>2. NCO Code</b>                       | <b>: 7433.10</b>   |
| <b>3. Duration of craftsmen Training</b> | <b>: One year (2 Semesters)</b>  |
| <b>4. Entry Qualification</b>            | <b>: Passed 10<sup>th</sup> class Under 10+2<br/>System of examination</b>   |
| <b>5. Unit Strength</b>                  | <b>: 16 trainees</b>   |
| <b>6. Space Norms</b>                    | <b>: 64 sq m (4 Sq.m/trainee)</b>  |
| <b>7. Power Norms</b>                    | <b>: 05 kw</b>   |
| <b>8. Instructor's Qualification</b>     | <b>: i. NTC/NAC in sewin technology(earlier<br/>trade name as "cutting &amp; sewing")<br/>with three years<br/>Experience in relevant field<br/>Or<br/>ii. Diploma in Garment fabricating<br/>technology / costume design<br/>with Two years' Experience in relevant<br/>field<br/>Or<br/>iii. Degree in Fashion &amp; apparel<br/>Technology With one year experience<br/>in relevant field</b> |
| <b>9. Desirable Qualification</b>        | <b>: Preference will be given to a candidate<br/>With Craft Instructors Training certificate<br/>(CITS) in Cutting &amp; Sewing (earlier trade<br/>name as "cutting &amp; sewing")</b>   |

Note: Out of two instructors required for the unit 1+1, one must have Degree/Diploma & other must have NTC/NAC qualifications

## OBJECTIVE OF THE COURSE :

To create skilled work force for Self Employment/Working in garment manufacturing Industry as –

- **Sewing Machine Operator**
- **Assistant to Designer**
- **Assistant worker in Boutique**
- **Sample room designer**
- **Sample Coordinator**

Syllabus for the trade of **"Sewing Technology"** under craftsmen training scheme

**First Semester (Common for Sewing Technology & Dress Designing)**

**Semester code no. : sewing tech. - 01**

**Duration : Six months**

<b>Week No.</b>	<b>Trade Practical</b>	<b>Trade Theory</b>
1.	Familiarization with the Institute.	Introduction <ul style="list-style-type: none"> <li>• Trade</li> <li>• Job Prospects</li> <li>• Safety precautions</li> <li>• First Aid</li> </ul>
2.	Familiarization & handling of tools.  Safety Precautions while handling the tools.	Basic Industrial Terminology Trade related Tools, their importance, usage and safety <ul style="list-style-type: none"> <li>• Measuring Tools</li> <li>• Drafting Tools</li> <li>• Marking Tools</li> <li>• Cutting Tools</li> <li>• Sewing Tools</li> <li>• Finishing Tools</li> </ul>
3.	<ul style="list-style-type: none"> <li>• Identification of fabrics and texture</li> <li>• Handling of Fabrics</li> <li>• Making weave samples</li> </ul>	Fabric Fundamentals <ul style="list-style-type: none"> <li>• Brief idea about fibers</li> <li>• Types of Fabrics</li> <li>• Selection of Needle and thread according to fabric types</li> <li>• Broken Needle Policy</li> </ul> Fabric Preparation for cutting <ul style="list-style-type: none"> <li>• Fabric Grain</li> <li>• Selvedge</li> <li>• Shrinkage</li> <li>• Straightening the fabric Grains</li> </ul> Measurements <ul style="list-style-type: none"> <li>• Units</li> <li>• Measuring Techniques</li> </ul>
4.	Practice on Industrial Single needle lock stitch Sewing Machine <ul style="list-style-type: none"> <li>• Ergonomic principle of sitting on sewing machine</li> <li>• Speed Control</li> <li>• Practice on paper</li> <li>• Threading of machine</li> <li>• Bobbin winding &amp; loading</li> <li>• Practice on fabric</li> </ul>	Basic Sewing Machine <ul style="list-style-type: none"> <li>• Parts and functions</li> <li>• Machine needle</li> <li>• Stitch formation</li> <li>• Sewing machine practice</li> <li>• Care and maintenance</li> <li>• Trouble Shooting</li> <li>• Types of Industrial Sewing Machine</li> </ul>
5.	Running on	Over lock machine

	<ul style="list-style-type: none"> <li>• Straight lines</li> <li>• Square</li> <li>• Zig zag lines</li> <li>• Circle</li> <li>• Semi circle</li> <li>• Spiral</li> </ul> Practice on Over lock machine <ul style="list-style-type: none"> <li>• Threading</li> <li>• Running</li> <li>• Minor adjustments</li> </ul>	<ul style="list-style-type: none"> <li>• Parts and functions</li> <li>• Machine practice</li> <li>• Care and maintenance</li> <li>• Trouble Shooting</li> </ul> Basic Garment Analysis
6.	Practice of making Seams <ul style="list-style-type: none"> <li>• Plain Seam (Straight &amp; Curved) with seam finishes</li> <li>• Self Enclosed seams</li> <li>• Top stitched seams</li> <li>• Corded Seam</li> <li>• Decorative seams</li> </ul> Practicing with Sewing Aids	Seams <ul style="list-style-type: none"> <li>• Classification</li> <li>• Uses</li> <li>• Properties of Seams</li> <li>• Seam finishes</li> </ul> Sewing Aids <ul style="list-style-type: none"> <li>• Presser foots</li> <li>• Folders</li> <li>• Guides</li> </ul>
7.	Making Samples of <ul style="list-style-type: none"> <li>• Darts</li> <li>• Pleats</li> </ul>	Introducing Fullness <ul style="list-style-type: none"> <li>• Darts – Necessity, type &amp; precautions during stitching</li> <li>• Pleats – Necessity, type &amp; uses</li> </ul>
8.	Making Samples of <ul style="list-style-type: none"> <li>• Tucks</li> <li>• Gathers and Shirrs</li> <li>• Frills</li> </ul>	Introducing Fullness <ul style="list-style-type: none"> <li>• Tucks – Types &amp; use</li> <li>• Gathering and Shirring</li> <li>• Flare</li> <li>• Ruffles/Frills – Types (Straight &amp; Circular) &amp; uses</li> </ul>
9. & 10.	Practice of Hand stitches & Making Samples of them	Hand stitches <ul style="list-style-type: none"> <li>• Hand needles – Size &amp; types</li> <li>• Sewing Thread</li> <li>• Types &amp; Applications of hand stitches</li> </ul>
11.	Making samples of <ul style="list-style-type: none"> <li>• Faced Hem</li> <li>• Edge stitched hem</li> <li>• Double stitched hem</li> <li>• Band hem</li> <li>• Ease in a hem</li> <li>• Mitered hem</li> </ul> Practice of the corner makings <ul style="list-style-type: none"> <li>• Self turned</li> <li>• With additional strip</li> </ul>	Hems <ul style="list-style-type: none"> <li>• Types</li> <li>• Uses</li> </ul> Corner Makings <ul style="list-style-type: none"> <li>• Types</li> <li>• Uses</li> </ul>
12. & 13.	Making samples of <ul style="list-style-type: none"> <li>• Casing with Drawstring</li> <li>• Casing with elastic</li> </ul>	Casing <ul style="list-style-type: none"> <li>• Introduction</li> <li>• use</li> </ul>

	<ul style="list-style-type: none"> <li>• Casing with heading</li> <li>• Inside applied casing</li> <li>• Outside applied casing</li> </ul> <p>Making samples of edge finishing</p> <ul style="list-style-type: none"> <li>• Bias facing</li> <li>• Combination shaped facing</li> <li>• Outside facing</li> <li>• Self facing</li> <li>• Shaped facing</li> <li>• Binding</li> <li>• Piping</li> </ul>	<p>Edge Finishing</p> <ul style="list-style-type: none"> <li>• Facings</li> <li>• Bindings</li> <li>• Pipings</li> </ul>
14.	Making samples of different shaped necklines	<p>Necklines</p> <ul style="list-style-type: none"> <li>• Different shapes of neckline</li> </ul>
15.	<p>Samples of making samples of Plackets</p> <ul style="list-style-type: none"> <li>• Faced Placket</li> <li>• Continuous Placket</li> <li>• One Piece Placket</li> <li>• Two Piece Placket</li> <li>• Two piece Placket with pleat</li> <li>• Zippered Placket <ul style="list-style-type: none"> <li>○ Lapped</li> <li>○ Fly Front</li> <li>○ Open End</li> <li>○ Invisible</li> <li>○ Visible</li> </ul> </li> </ul>	<p>Plackets</p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Sample makings</li> </ul>
16.	<p>Samples of making different Pockets</p> <ul style="list-style-type: none"> <li>• Patch</li> <li>• Inseam</li> <li>• Cut/slash</li> </ul>	<p>Pockets</p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Design variations</li> </ul>
17.	Samples of making Collars	<p>Collars</p> <ul style="list-style-type: none"> <li>• Classification</li> <li>• Collar terms</li> </ul>
18.	Samples of making Sleeves	<p>Sleeves</p> <ul style="list-style-type: none"> <li>• Classification</li> <li>• Sleeve length variation</li> <li>• Sample making of Sleeves with and without cuff.</li> </ul>
19.	<p>Practice of fixing fasteners as Buttons, Hooks, Eyes, Press Studs</p> <p>Practice of making Button holes by Hand</p> <p>Practicing Darning and Patching</p>	<p>Trimmings</p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Applications</li> <li>• Fixing of Buttons, hooks etc.</li> <li>• Making of Buttonhole</li> </ul> <p>Mending</p> <ul style="list-style-type: none"> <li>• Darning</li> <li>• Patching</li> </ul>
20.	Stitching of Ladies suit	Drafting & developing Pattern for Ladies suit

21. & 22.	Industrial Training (2 weeks).
23.	<b>Project Work</b> Prepare <b>Minimum three</b> Basic Dresses using the skills learned like Apron, Baby set, A-Line Frock etc.
24& 25.	Employability skill
26.	Examination

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## Second Semester

**Semester code no. :**

**Duration : Six months**

<b>Week No.</b>	<b>Trade Practical</b>	<b>Trade Theory</b>
1.	<ul style="list-style-type: none"> <li>• Revision of work done in Semester I</li> <li>• Practice of taking Body Measurements</li> </ul>	<p>Human Figures</p> <ul style="list-style-type: none"> <li>• Eight Head Theory</li> <li>• Brief introduction about Joints and Muscles</li> <li>• Types of Figures</li> </ul> <p>Body Measurements</p> <ul style="list-style-type: none"> <li>• Importance</li> <li>• Types &amp; Measuring Techniques</li> <li>• Precautions</li> <li>• Measurement Charts</li> </ul>
2.	* Practicing different types of layout using the given patterns	<p>Patterns</p> <ul style="list-style-type: none"> <li>• Importance</li> <li>• Pattern Information</li> <li>• Types</li> </ul> <p>Spreading &amp; Pattern Layout</p> <ul style="list-style-type: none"> <li>• Importance</li> <li>• Spreading methods/machines</li> <li>• Types of layout</li> </ul> <p>Pattern Drafting</p> <ul style="list-style-type: none"> <li>• Drafting/Pattern Terminology</li> <li>• Principles of Pattern drafting</li> </ul>
3.	<p>Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing &amp; Folding of Saree Petticoat.</p> <p>Checking the Fitting of the garment</p>	<p>Pressing</p> <ul style="list-style-type: none"> <li>• Tools</li> <li>• Methods</li> </ul> <p>Importance of Pressing</p> <p>Trial Room</p> <ul style="list-style-type: none"> <li>• Necessity</li> <li>• Specification</li> </ul> <p>Sketching and drafting of Saree Petticoat.</p>
7.	<p>Practice on special industrial sewing machines –</p> <ul style="list-style-type: none"> <li>• Double Needle Machine</li> <li>• Button Hole Machine</li> <li>• Button Sewing Machine</li> <li>• Multi purpose Machine (Zig zag )</li> <li>• Bar Tack machine</li> <li>• Feed off the Arm Double Needle</li> </ul>	<p>Mass Production Process –</p> <ul style="list-style-type: none"> <li>• Sequence of operations</li> <li>• Types of cutting machines</li> <li>• Fusing Technology</li> <li>• Types of Industrial Machines Used in sewing section</li> <li>• Finishing</li> </ul>



8.	<b>Ladies Wear</b> Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> <li>• Ladies Tops/Short kurties</li> <li>• Ladies suit</li> <li>• Night wear (one piece/two piece)</li> <li>• Saree blouses</li> </ul> Checking the Fitting of the garment	Sketching and drafting of the following garments - <ul style="list-style-type: none"> <li>• Ladies Tops/Short kurties</li> <li>• Ladies suit</li> <li>• Night wear (one piece/two piece)</li> <li>• Saree blouses</li> </ul>
9.		
10.		
11.		
12.	<b>Kids Wear</b> Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> <li>• Dresses for new born</li> <li>• Dresses for Toddler</li> <li>• Dresses for Kids</li> </ul> Checking the Fitting of the garment	Sketching and drafting of the following garments - <ul style="list-style-type: none"> <li>• Dresses for new born</li> <li>• Dresses for Toddler</li> <li>• Dresses for Kids</li> </ul>
13.		
14.		
15.		
16.	<b>Gents Wear</b> Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> <li>• Kurta &amp; Pyazama</li> <li>• Casual Shirts &amp; Trousers</li> </ul> Checking the Fitting of the garment	Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> <li>• Kurta &amp; Pyazama</li> <li>• Casual Shirts &amp; Trousers</li> </ul>
17.		
18.		
19.		
20.		
21.	Methods of removing different kinds of stains in fabrics Checking of garments in respects of – <ul style="list-style-type: none"> <li>• Measurements</li> <li>• Stitching</li> <li>• Stains</li> <li>• Defects</li> <li>• Correcting measures</li> </ul>	Laundry Stains <ul style="list-style-type: none"> <li>• Classification</li> <li>• Removing techniques</li> </ul> Quality Control <ul style="list-style-type: none"> <li>• Definition, need &amp; planning</li> <li>• Types of Inspection</li> <li>• Stages of Inspection</li> <li>• Role of Quality Controller</li> </ul>
22. & 23.	Industrial Training ( 2 Weeks)	
24. & 25.	Choose any four garments mentioned above with specification sheet, Pattern & neatly finished garments and present the same.	
26.	Revisions & Examination	

## TRADE : SEWING TECHNOLOGY

### LIST OF TOOLS & EQUIPMENT

Sl. No.	Name of the Article	Quantity (Number)
<b>TRAINEES' TOOL KIT FOR 16 TRAINEES + 1 Instructor</b>		
1.	Measuring Tape 150 cm	17
2.	Seam Ripper	17
3.	Thimble	17
4.	Tailor's Card Scale Triangular	17
5.	Tailors Square – Plastic	17
6.	French Curve Set of three	17 sets
7.	Thread Cutter	17
8.	Scale plastic 24"	17
<b>Drafting/Cutting /Sewing Room Tools &amp; Equipment</b>		
1.	Scissors 25 cm	17
2.	Pinking Shears	05
3.	Leg Shaper – Plastic	17
4.	Garment Hangers	17
5.	Screw Driver Set	04 sets
6.	Table Sharpener	04
7.	Pressing Table	05
8.	Blanket for padding of Pressing Table	05
9.	Rubber mat (Size as per requirement)	05
10.	Sprayer	05
11.	Waste Bin Big / Small	10
12.	Pattern Punch	05
13.	Pattern Notcher	05
14.	Pattern Hanging Stand	04
15.	Water Tub 60 cm dia	01
16.	Stand for hanging dresses	05
17.	Trial room with 3 side mirrors of size 150 cm X 60 cm each with arrangements of hanging Dresses	01
18.	Electric Automatic steam press	05
19.	Sewing Machine – Single Needle Lock stitch Industrial model	16
20.	Over Lock Machine 3 Thread	01
21.	Zig Zag Multi Purpose Machine	01
22.	Double Needle Machine	01
23.	Button Hole machine	01
24.	Button Sewing Machine	01
25.	Bar Tack Machine	01
26.	Feed off the arm Double Needle	01

27.	Machine attachments	As per requirement
28.	Chairs with low back rest or stools for the machines	16
29.	Drafting Table	8
30.	Display Board Covered with glass or Acrylic Sheet 120 X 90 cm	02
31.	Instructor Table	01
32.	Instructor Chair	02
33.	Steel Almirah 195 X 90 X 60 cm	02
34.	Pigeon hole Almirah 10 lockers & separate locking arrangements for trainees	02
35.	Locks for above pigeon hole	16
36.	Wall Clock	03
37.	Calculator Desk Type	01
38.	White Board with accessories (size as per requirement)	02
39.	Dummy Lady , men ,kid(different size)	02 each
40.	<b>Theory Room</b>	
41.	Single desks for trainees with arrangements of keeping Books etc.	16
42.	Revolving Chairs without arms	16
43.	Faculty Table & Chair set	01
44.	Computer set with UPS & multimedia projector	01
45.	White Magnetic Board with Felt board & accessories	01
46.	Display Board	02
47.	Storage Almirah	01
48.	Book Shelf	01
49.	A/C unit split type 2 TR capacity with Stabilizer	As per requirement

Note:

- The quantity of hand Tools may be suitably increased as per the number of supernumeraries admitted in a unit.
- Trainees Tool kit may be treated as consumables in respect of trainees actually completing the course of one year (both the semesters) duration.

Note:

1. Due to the rapid changes in the technologies frequent Modernization of equipments and technologies is necessary.
2. Training Programme for Staff should be organized in the new fields added in the curriculum for the proper implementation of the same.
3. Experts from the Industry may be called for special lectures and demo's as and when required.

### **Trade testing and certification:**

After Completion of the course a trainee will be awarded NCVT certificate of Sewing Technology under CTS .

### **Further Learning Pathway:**

- addition NCVT certificates in the Dress Making by doing the second semester since the first semester is common with Sewing Technology.
- higher qualification under CITS.
- Following MES courses to improve their skill areas –
  - Apparel Production Supervisor
  - Fashion Accessories Designer
  - Apparel quality & compliance
  - Software application in Pattern Making
  - Maintenance of machines in Garment Sector.