

# **National Vocational & Technical Training Commission**

5th Floor, Evacuee Trust Complex Sector F-5/1, Islamabad

Tel: +92 51 904404 Fax: +92 51 904404 Email: info@navttc.org

#### **Author:**

Ms. Ammara Maqbool (Free Lance Consultant)

#### Reviewed by:

Dr. Ligaya Dumaonng (International Technical Advisor TVET Reform Support Programme), Mr. Naeem Akhter (Deputy team Leader component 2 TVET Reform Support Program), Ms. Qamar Fatima (Technical Advisor Curricula component 2 TVET Reform Support Program), Mr. Taimoor Tariq (Technical Advisor Competency Standards component 2 TVET Reform Support Program)

# Layout and Design by:

Ms. Maria Arif (Freelance Consultant)

## Date of approval by NCRC:

19th -20th Nov 2014

#### **Date of Notification:**

10th Dec 2014, vide notification no F.2-1/2013-DD(VT)

This curriculum has been produced by the National Vocational & Technical Training Commission (NAVTCC) with the technical assistance of TVET Reform Support Programme, which is funded by the European Union, the Embassay of the Kingdom of the Netherland, Federal Republic of Germany and the Royal Norwegian Embassy. The Programme has been commissioned by the German Federal Ministry for Economic Cooperation and Development and is being implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

# **Table of Contents**

1. Competency A. Create Surface Design	04
2. <b>Competency B</b> . Draw Fashion Illustrations & Technical Drawings	06
3. Competency C. Perform Surface Ornamentation Technique	08
4. Competency D. Make Bodice Blocks & Patterns	11
7. Competency E. Perform Pattern Cutting & Garment Stitching	15
8. Competency F. Perform Garment Finishing	18
9. List of Tools and Equipment	2

#### **Competency Module A: Create Surface Design**

**Overview:** This competency standard identifies the competencies required to create surface pattern designs for the fabric used in fashion production. You will be expected to conduct research to select a theme, perform research on a selected theme, develop surface design according to elements and principles of design and perform surface pattern repeat.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
A1 – Conduct research to select a theme	Performance Criteria  Trainee will be able to:  P1. Perform brainstorming through mind mapping  P2. Carry out research using different research sources  Primary research  Secondary research  P3. Create research board on the selected theme  P4. Create mood board with reference to research board	<ul> <li>Knowledge and Understanding</li> <li>Trainee must know and understand</li> <li>K1. The process of brainstorming for the selection of theme.</li> <li>K2. Cultural and market, seasonal trends</li> <li>K3. Difference between primary and secondary research</li> <li>K4. Concept of research board</li> <li>K5. Concept of mood board</li> </ul>	Non-Consumables: Internet, computer, multimedia  Consumables: Sketch book, pencil, eraser, magazines, sharpener, colour media, glue.
	P5. Create color board on the basis of selected theme	K6. Importance of color board	

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
A2. Develop Surface Designs according to elements and principles of design	Trainee will be able to P1. Create motif design with reference to research following elements and principles of design  P2. Develop designs from the theme research  P3. Demonstrate the use of color theory	Trainee must know and understand: K1 Elements and principles of design K2 Process of design development K3 Importance of color theory	Non-Consumables: color palette, paint brushes, water container, scale, compass,  Consumables: Sketch book, poster paints, water colour pencils, pencil eraser, sharpener, note book.
A3. Perform Surface Pattern Repeats	Trainee will be able to: P1. Demonstrate different types of surface pattern repeats P2 Render surface repeat using different media	Trainee must know and understand: K1 Different types of surface pattern repeats K2 Various media used for rendering	Non-Consumables: paint brushes, water container, sharpener, scale, colour palette  Consumables: Sketch book, butter paper, poster paints, water color pencils, pencil, eraser.

# **Competency Module B. Draw Fashion Illustrations and Technical Drawings**

**Overview:** This competency standard identifies the competencies required to draw fashion illustration and technical drawings. You will be expected to Draw basic fashion sketch, draw fashion illustrations with different garment components.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
<b>B1</b> Draw basic fashion sketch	Trainee will be able to: P1. Explain basic figure types	Trainee must know and understand:  K1. Basic figure types i.e. tall & thin, tall & heavy, short & thin, short &	Non-Consumables: Sharpener, colour palette, set square.
	P2. Draw body structure according to proportion	heavy, top heavy, hip heavy, average	Consumables:
	P3. Draw basic croqui	K2. Basic human body proportions; nine head figure (basic & with musclature)	Sketch book, pencil, eraser, poster paints, water pencils
		K3. Drawing of different body part i.e. hair styles, hands, feet	
		K4. Concept of croqui in fashion design	
<b>B2</b> Draw Fashion Illustrations with	Trainee will be able to:	Trainee must know and understand:	Non-Consumables:
different garment components	P1. Illustrate different types of garment components e.g.	K1. Different types of necklines, collars, sleeves, skirts and their	Drawing boards

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
	necklines, collars, sleeves, skirts etc. and their variations.  P2. Draw croquis in different poses  P3. Illustrate croquis with different garment designs  P4. Make technical drawings of designed garments	variations.  K2. Technical details of croqui drawing in different poses  K3. Illustration of garment design  K4. material board of design  K5. technical drawing of the garment	Thumb pins Paint Brushes Computer with internet Print media  Consumables: Drawing sheets Drawing pencils Eraser, poster paints, Water colour pencils

# **Competency Module C. Perform Surface Ornamentation Techniques**

**Overview:** This competency standard identifies the competencies to perform different types of surface ornamentation techniques. You will be expected to perform fashion dyeing, perform fabric painting, perform block printing, perform screen printing and apply basic embellishment techniques.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
C1. Perform fabric dyeing	Trainee will be able to:  P1. Use different types of fabrics for dyeing  P2. Prepare dye solution with proper ratio of color  P3. Prepare fabric for dyeing applying different techniques and washing  P4. Demonstrate different types of fabric dyeing techniques	<ul> <li>Trainee must know and understand:</li> <li>K1. Types of fabrics used for dyeing</li> <li>K2. Different type of dyes used for fabric dying</li> <li>K3. The process of preparing the dye</li> <li>K4. Process of preparing the fabric</li> <li>K5. Techniques of dyeing the fabric</li> <li>K6. Procedure of dyeing the fabric</li> <li>according to specific technique</li> </ul>	Non-Consumables: wooden stick, stove, containers, fabric scissor, iron  Consumables: Fabric, fabric dyes, tying thread, salt, phenyl.
C2. Perform Fabric Painting	Trainee will be able to:  P1. Demonstrate different techniques used for fabric painting  P2. Use different types of paints for fabric painting	<ul><li>Trainee must know and understand:</li><li>K1. Different types of paints used for fabric painting</li><li>K2. Different types of fabrics that can be used for fabric painting.</li></ul>	Non-Consumables: brushes, palette, water container, sharpener, common pin/ punching tool, piece of sponge, light

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
		K3. Types of paints and other material used for fabric painting	
		<ul><li>K4. Method of tracing the design on fabric ( light table, punching method)</li><li>K5. Process of fabric painting</li></ul>	Consumables: Fabric, fabric paints, salt, gutta, tracing paper, pencil, eraser, kerosene oil, chalk/ black polish/ neel
C3 Perform Block Printing	Trainee will be able to:  P1. Prepare the dye for block printing.  P2. Demonstrate block printing technique.	Trainee must know and understand:  K1. Process of preparing dyes for block printing.  K2. Process of block printing.	Non-Consumables: Wooden blocks, colour containers, printing table  Consumables: pigments, fabric, jute, common pins, news paper, plastic sheets
C4. Perform Screen Printing	Trainee will be able to:  P1. Select appropriate tools and materials for screen printing  P2. Prepare pigment for screen printing	Trainee must know and understand:  K1. Tools, equipment and materials used for screen printing  K2. Types of dyes and pigments used for screen printing	Non-Consumables: Screen, squeegee, iron, screen printing table  Consumables: Screen printing pigment,

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
	<ul><li>P3. Prepare the fabric for screen printing</li><li>P4. Perform screen printing</li><li>P5. Fix the color on fabric after printing</li></ul>	K3. Process of preparing screen printing  K4. Process of screen printing  K5. Process of color fixing after printing	fabric
C5. Apply Basic	Trainee will be able to:	Trainee must know and understand	Non-Consumables:
Embellishment techniques	P1. Perform basic hand embroidery techniques  P2. Demonstrate the use of	K1. Different types of embroidery  K2. Types of material for embellishment	Embroidery frames, embroidery needles.
	different materials for embellishment	K3. Types of surface in embellishment	Consumables: Fabric, embroidery thread, tracing sheets, embellishment materials

# **Competency Module D: Make basic blocks and Patterns**

**Overview:** This Competency Standard identifies the competencies required to make basic block and pattern by fashion designer. You will be expected to take full body measurements, construct basic block of medium size, create pattern using basic block.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
D1 Take full body measurement	Trainee will be able to:  P1. Take full body measurement horizontally and vertically  P2. Make measurement chart according to the measurements taken.	Trainee must know and understand:  K1. Full body measurement i.e. shoulder, bust, waist, hip, arm length, neck, calves, thigh.  K2. Measurement chart	Non- consumables  Measuring tape, note book, scale.  Consumables  Pencil, eraser
D2. Construct basic blocks	Trainee will be able to:  P1. Create basic blocks according to standard measurement  P2. Trace accurately the basic block on pattern sheet  P3. Label all the basic information on the block according to international standards	Trainee must know and understand:  K1. Usage of tools and equipment for measurement and drafting  K2. Drafting and labelling of basic bodice blocks according to international standards:  Waist  Bust  Shoulder line  Center front  Center back  Size  K3. drafting and labelling of sleeve block according to international standard:	Non- consumables Measuring tape, japenese scale, French curve, set square, tracing wheel, clutch pencil, paper scissors, paper cutter, cutting matt  Consumables Pattern sheets, pencil/pen, bleach board, clutch pencil leads, paper cutter blades, tracing paper, stationary items, masking tape, felt tip pen

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
		<ul> <li>Grain line</li> <li>Shoulder line</li> <li>Bicep line</li> <li>Elbow line</li> <li>Wrist line</li> <li>Front</li> <li>Back</li> <li>Drafting and labelling of basic trouser block according to international standard: <ul> <li>Waist</li> <li>Hip line</li> <li>Knee line</li> <li>Center front/grain line</li> <li>Center back/grain line</li> <li>Waist dart</li> <li>Ankle line</li> <li>Crotch line</li> </ul> </li> </ul>	
		<ul> <li>Inseam</li> <li>Drafting and labelling of basic skirt block according to international standard: <ul> <li>Waist</li> <li>Hip line</li> <li>Knee line</li> <li>Center front/grain line</li> <li>Center back/grain line</li> <li>Waist dart</li> </ul> </li> </ul>	

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
D3. Create Pattern using Basic Block	Trainee will be able to:  P1. Trace block on pattern sheet  P2. Draw pattern according to garment design requirements and specified measurements  P3. Complete final pattern which	<ul> <li>Knowledge and Understanding</li> <li>Trainee must know and understand:</li> <li>K1. Tracing of the blocks accurately</li> <li>K2. Drafting and labelling of basic top using basic bodice block.</li> <li>K3. Concept of ease and seam allowances</li> <li>K4. Drafting different types of</li> </ul>	Non- consumables  Measuring tape, japenese scale, French curve, set square, tracing wheel, clutch pencil, paper scissors, paper cutter, cutting mat
	includes ease, seams and allowance for fabric behaviour including consistency, shrinkage capacity and elasticity	necklines i.e. round (with placket & without placket), V neckline, square neckline, sweetheart neckline  K5. Labelling the neckline pattern including:  Grain line  Center back line  Shoulder notch  Placket  K6. Drafting and labelling different types of sleeves i.e. set-in sleeve, raglan, French cuff:  Grain line  Bicep line  Elbow line  Wrist  Front  Back  Seam allowances	Consumables  Pattern sheets, pencil/pen, bleach board, clutch pencil leads, paper cutter blades, tracing paper, stationary items, masking tape, felt tip pen

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
		K7. Drafting and labelling of trouser pattern:  Waist line Hip line Knee line Center front/grain line Center back/grain line Waist dart Ankle line Crotch line Inseam Seam allowances  K8. Drafting and labelling skirt pattern (circular, box pleated)  Waist Hip line Knee line Center front/grain line Center back/grain line Waist dart K10. Drafting and labelling pattern for kurta  K11. Drafting and labelling pattern	
		for shalwar	

#### **Competency Module E: Perform Pattern Cutting and Garment Stitching**

**Overview:** This Competency Standard identifies the competencies required to perform pattern cutting and garment stitching. You will be expected to perform stitching of different garments, including top stitching, skirt stitching, trouser stitching, kurta & shalwar stitching, sleeves stitching and neckline stitching. Your underpinning knowledge regarding tools, equipment, processes and procedures involved in stitching of a garment will be sufficient to provide you the basis for your work.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
E1 Use equipment and machinery	Trainee will be able to:	Trainee must know and understand:	Non-Consumables:
properly	P1. Explain different parts of sewing machine and their uses  P2. Explain parts and use of over lock machine	<ul><li>K1. Basic parts of sewing machine and their use.</li><li>K2. Basic parts of over lock machine and its use.</li></ul>	Industrial lock stitch machine, over lock machine, steam iron, bobbin, bobbin case.
	lock machine		Consumables:
	P3. Use steam iron properly	K3. Method of using steam iron	Thread, fabric, note book, pen/ pencil, sewing
	P4. Maintain equipment and machinery in use	<ul><li>K4. Maintenance of equipment and machinery</li><li>K5. Exercise of different types of seams e.g. on straight line, curved line, zig zag etc.</li></ul>	machine oil
	P5. Practice seams on straight and curved lines		
E2 Perform fabric cutting as per	Trainee will be able to:	Trainee must know and understand:	Non-Consumables: Cutting table,
pattern	P1. Mark pattern lines and	K1. Usage of tools and equipment	fabric scissors,

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
	allowances on fabric, placing the pattern over it	for fabric cutting K2. Concept of grain line	Fabric Cutter, common pins, measuring tape,
	P2. Cut the fabric according to the marked lines	K3. Process of marking and cutting the pattern on fabric, considering wastage	measuring scale, steam iron, tracing wheel
	P3. Use the cutting tools safely	K4. Health and safety rules to use cutting tools safely.	Consumables: Tailoring chalks, fabric
E3 Stitch garment components as	Trainee will be able to:	Trainee must know and understand: K1. Usage of different tools and	Non-Consumables:
per pattern	P1. Assemble all the cut pieces of fabric as per labelling by over locking them	equipment for stitching i.e. sewing machine, over lock machine, steam iron	Clipper, steam iron, Industrial flat lock machine, over lock
	P2. Stitch all assembled pieces following the marked lines	K2. Setting of stitching equipment	machine, bobbin, bobbin case
	P3. Handle tools and equipment safely	K3. Procedure of stitching the necklines (round, V, square,	Consumables:
		sweetheart) according to the assembled fabric pieces	Fabric, sewing thread, tailoring chalk
		K4. Procedure of stitching sleeves according to the assembled fabric pieces	
		K5. Procedure of stitching a basic top according to the assembled fabric pieces	

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
		K6. Procedure of stitching a trouser according to the assembled fabric pieces  K7. Procedure of stitching skirt (circular, box pleated) according to the assembled fabric pieces	
		K8. Procedure of stitching a shalwar according to the fabric assembled pieces	
		K9. Procedure of stitching a kurta according to the fabric assembled pieces	
		K10. Health and safety rules to use tools and equipment safely.	

# **Competency Module F: Perform Garment Finishing**

**Overview**: This Competency Standard identifies the competencies required to perform garment finishing by fashion designer. You will be expected to perform different steps in finishing of a garment, including verifying measurements, checking stitching quality, finalizing and packaging the garment.

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
F1 Verify measurements according to pattern	Trainee will be able to:  P1. Compare the stitched garment with pattern measurements  P2. Make amendments, if required  P3. Recheck the garment after amendments, as per pattern	Trainee must know and understand:  K1.Tools and equipment use for measurement  K2.Process of comparing garment measurements with pattern  K3.Process of making amendments	Non-Consumables: Measuring tape, sewing machine, clipper, seam ripper, fabric scissors, machine needles, bobbin and bobbin case  Consumables Tailoring chalks, thread, machine oil

Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
F2 Check Stitching quality	Trainee will be able to:  P1. Remove unwanted threads from final garment  P2. Verify the following areas: <ul> <li>Stitch count</li> <li>Thread breakage</li> <li>Thread over lapping</li> <li>Stains and fabric tempering</li> <li>Puckering</li> <li>Stitching alignment</li> <li>Over locking</li> <li>Button attachments</li> <li>Label attacments</li> <li>Button holes etc.</li> </ul> <li>P3. Mark the defects according to findings and make corrections</li>	<ul> <li>Trainee must know and understand:</li> <li>K1. Stitching quality standards on the basis of: <ul> <li>Stitch count</li> <li>Thread breakage</li> <li>Thread over lapping</li> <li>Stains and fabric tempering</li> <li>Puckering</li> <li>Stitching alignment</li> <li>Button attachments</li> <li>Label attachments</li> <li>Button holes</li> </ul> </li> <li>K2. Process of marking defects and making corrections</li> </ul>	Non-Consumables: clipper, ruler, measuring tape  Consumables: Marking chalk, marking stickers, paper tape, marker, percolon oil.
F3 Perform Packaging of finished garment	<ul> <li>Trainee will be able to:</li> <li>P1. Use different types of packaging material</li> <li>P2. Place hang/ price tags on the garment individually</li> <li>P3. Iron the final garment according to the industrial standards</li> </ul>	Trainee must know and understand:  K1. the material used for packaging the garment K2. Describe the types of tags for garments e.g:  • Brand tag • Size tag • Care tag • Fit tag	Non-consumables Tag gun, packing table  Consumables Tags, stickers, tape, tag bullets, packing bags, common pins, collar pins, collar strip, butter papers, card sheets, clips, cartons,

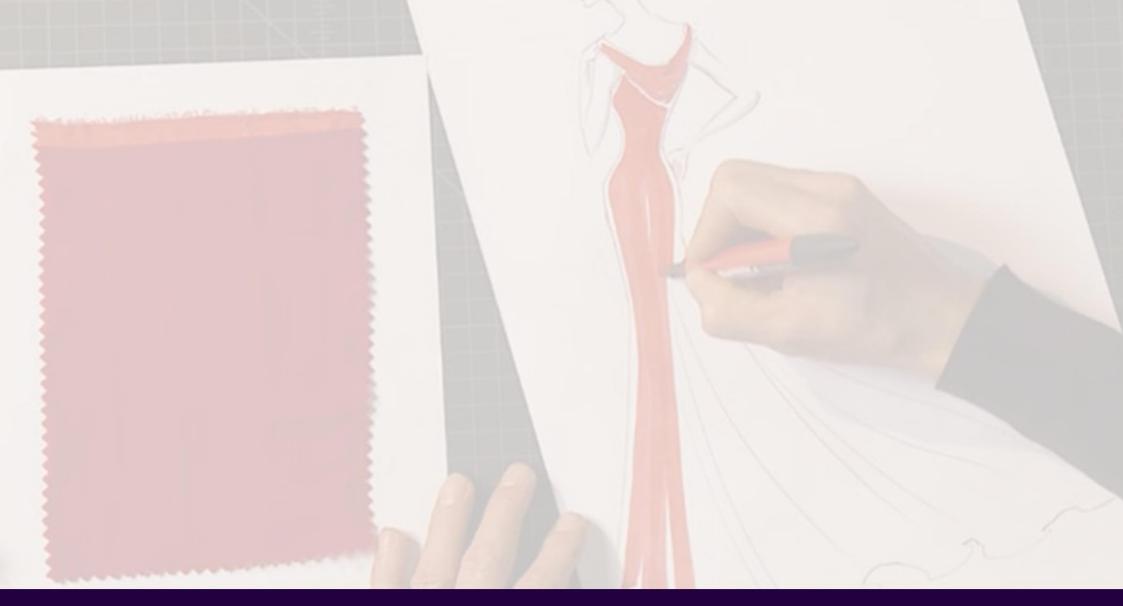
Competency Unit	Performance Criteria	Knowledge and Understanding	Tools and Equipment
	P4. Perform the folding of garment as per style requirement P5. Perform packaging of final garment as per requirement	K3. Describe the standard placement of tags on the garment  K4. Describe the process of folding and packaging of the garment according to its style  K5. Describe the process of packaging	masking tape, barcodes

# **List of Tools/Equipment**

- Sketch books
- Stationary items (paper, pencil/pen)
- Paint Brushes
- Colouring medium
- Computer with internet
- Print media
- Colour palette
- Water container
- compass
- Drafting pencils
- Scale
- set square
- Measuring Tape
- Measuring scale
- Japanese scale
- French curve
- tracing wheel
- clutch pencil
- paper scissors

- paper cutter
- cutting matt
- Pattern sheets
- bleach board
- clutch pencil leads
- paper cutter blades
- tracing paper
- masking tape
- felt tip pen
- Cutting table,
- fabric scissors
- Fabric Cutter,
- common pins
- measuring scale,
- steam iron
- Tailoring chalks,
- fabric
- Sewing machine
- Overlock machine
- Steam iron table
- machine needles
- hand sewing needles

- Seam ripper,
- Clipper
- Bobbin and bobbin case,
- Machine oil
- Thread,
- Fusing
- Ruler
- Stain removing gun
- Percolone oil (for removing stains)
- Tag gun
- Packing table
- Tags
- Stickers
- Tag bullets
- Packing bags
- tracing papers
- Health and safety manual
- Safety shoes,
- Fire extinguisher,
- Smoke alarm,
- First aid box,
- Tool box/bins



# **National Vocational & Technical Training Commission (NAVTTC)**

5th Floor Evacuee Trust Complex Sector F-5/1, Islamabad.

T +92 51 904404

F +92 51 904404

E info@navttc.org

I http://www.navttc.org/