

CURRICULUM FOR FABRIC PRINTING

6-MONTHS
(Certificate course)

National Vocational & Technical Training Commission, Islamabad (February, 2012)



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TRAINING OBJECTIVES

The major objectives of this course are to:

- Introduce the elements & principles of design
- Enable students to develop designs for apparel & upholstery
- Make students aware about role of colors in printing fabrics
- Develop the skills of fabric dyeing (tie & dye, batik)
- Widen the skills of fabric printing (spray printing, stenciling, block printing & screen printing)
- Make students acquainted with market trends in fabric designing & printing.

CURRICULUM SALIENT POINTS

Entry level.	Middle.
Duration of course.	6-Months.
Total training hours.	800-Periods
Training hours per day.	7-Periods (Friday 5 Periods)
Training hours per week.	40-Periods
Training Methodology.	80% practical 20% Theory

SKILL PROFICIENCY DETAILS

On successful completion of this course, trainee should be able to:

1. Make design for apparel & upholstery
2. Develop color harmonies for apparel & upholstery
3. Apply the skill of fabric dyeing (tie & dye, batik)
4. Carry out brush painting methods for fabrics
5. Implement the skill of fabric printing (spray printing, stenciling, block printing, & screen printing)

KNOWLEDGE PROFICIENCY DETAILS

On successful completion of this course, trainee should be able to:

1. Understand the application of design & principles in designing for fabrics
2. Describe the designing for fabrics role of colour in designing for fabrics.
3. Comprehend the technical aspects of fabric dyeing, painting & printing
4. Explain the finishing treatments for printed fabrics
5. Know the market trends in fabric designing & printing

SCHEME OF STUDIES

Fabric Printing (6-Month) Course

Sr. No	Main Topics	Theory Hrs.	Practical Hrs.	Total Hrs.
1.	Elements & principles	30	50	80
2.	Design development	20	60	80
3.	Colors	20	50	70
4.	Block printing	15	80	95
5.	Screen printing	15	80	95
6.	Batik	15	80	95
7.	Tie & dye	15	80	95
8.	Brush painting	15	80	95
9.	Spray printing	15	80	95
10.	Field Work			
Total Hours		160	640	800

DETAIL OF COURSE CONTENTS
FABRIC PRINTING
(6-Month Course)

Sr. No	Detail of Topic	Theory Hours	Practical Hours
1.	Elements & principles 1.1.1 Line 1.1.2 Shape & pen 1.1.3 Colour 1.1.4 Texture 1.1.5 Space 1.2 Principles of design 1.2.1 Harmony 1.2.2 Composition 1.2.3 Balance 1.2.4 Emphasis 1.2.5 Proportion	30	50
2.	Design development 2.1 Source of inspiration 2.2 Development of croquets 2.3 Reports 2.3.1 Block repeat 2.3.2 Mirror repeat 2.3.3 Half drop repeat 2.3.4 Brick repeat 2.3.5 Diamond repeat 2.4 Practical 2.4.1 Design exercise for three sources of inspiration employing all repeats	20	60
3.	Colour 3.1 Color wheel 3.2 Tint & shades 3.3 Warm & cool colors & neutrals 3.4 Value & intensity 3.5 Colours harmonies	20	50

	<p>3.6 Development of color ways</p> <p>3.7 Consideration while selection of colors For apparel & upholstery</p> <p>3.8 Practical (same as 3.1 to 3.6)</p>		
4.	<p>Tie & dye</p> <p>4.1 Introduction to tie & die</p> <p>4.2 Tools & equipment for tie & die</p> <p>4.3 Dye & chemicals</p> <p>4.4 Methods of tie & die</p> <p>4.4.1 Folding</p> <p>4.4.2 Pleating</p> <p>4.4.3 Web binding</p> <p>4.4.4 Chemical</p> <p>4.4.5 Role wrapping</p> <p>4.4.6 Twisting</p> <p>4.4.7 Stitching</p> <p>4.4.8 Knotting</p> <p>4.4.9 Snap fosterers</p> <p>4.4.10 Spiral twisting</p> <p>4.5 Projects</p> <p>4.5.1 Swatch book tie & die templates</p> <p>4.5.2 Apparel</p>	15	80
5.	<p>Batik</p> <p>5.1 Introduction to batik</p> <p>5.2 Tools & equipment for batik</p> <p>5.3 Dyes & chemicals</p> <p>5.4 Design development</p> <p>5.5 Method of batik</p> <p>5.5.1 Dip method</p> <p>5.5.2 Brush method</p> <p>5.5.3 Use of painting tool</p> <p>5.5.4 Cracker effect</p> <p>5.5.5 Discharge effect</p> <p>5.6 Project</p>	15	80

	<p>5.6.1 Wall panel</p> <p>5.6.2 Swatch book of batik samples</p>		
6.	<p>Brush Painting</p> <p>6.1 Introduction to brush printing</p> <p>6.2 Tools & equipment for brush printing</p> <p>6.3 Paints & chemicals</p> <p>6.4 Design development</p> <p>6.5 Methods of brush painting</p> <p>6.5.1 Fabric paints</p> <p>6.5.2 Emboss paints</p> <p>6.5.3 Pearl paints</p> <p>6.5.4 Silk paints</p> <p>6.6 Project</p> <p>6.6.1 Swatch book of brush painting samples</p> <p>6.6.2 Table runner using method of brush painting</p>	15	80
7.	<p>Block printing</p> <p>7.1 Introduction block printing</p> <p>7.2 Tools & equipment for block printing</p> <p>7.3 Design development</p> <p>7.4 Colours separation & registration</p> <p>7.5 Method of block carving</p> <p>7.5.1 Vegetable stamping</p> <p>7.5.2 Linoleum blocks</p> <p>7.5.3 Wooden blocks</p> <p>7.6 Preparation of color parts</p> <p>7.7 Process of printing with blocks</p> <p>7.8 Projects</p> <p>7.9 Swatch book of printing samples</p> <p>7.10 Bed linen</p>	15	80
8.	<p>Screen printing</p> <p>8.1 Introduction of screen printing</p> <p>8.2 Tools & equipment for screen printing</p> <p>8.3 Design development</p> <p>8.4 Color separation of registration</p>	15	80

	8.5 Techniques of screw making 8.5.1 Stencil 8.5.2 Block out screens 8.5.3 Photographic screens 8.6 Preparation of color parts 8.7 Process of printing with screens 8.8 Projects swatch book of screen printing samples 8.8.1 Upholstery 8.8.2 Apparel		
9.	Spray printing 9.1 Introduction to spray printing 9.2 Tools & equipment for spray printing 9.3 Paints & chemicals 9.4 Design development 9.5 Techniques in spray printing 9.5.1 Free hand method 9.5.2 Stenciling method 9.6 Project 9.6.1 Swatch book of spray printing samples 9.6.2 Cushion	15	80
10.	Field work 10.1 Visit to textile mills(printing section)		
	Total	160	640

LIST OF MACHINERY / EQUIPMENT / TOOLS ETC
(For a Class of 25 Students)

Name of Trade	Industrial Stitching Machine Operator
FABRIC PRINTING	6 - Months

Sr. No.	List of furniture	Quantity
1.	Students Table (2'x3')	25
2.	Printing Tables (4' x 6')	10
3.	Chairs/Stools	25
4.	Tracing tables	05
5.	Printing block	

Sr. No.	List of Tools & Equipments	Quantity
1.	Stamping pads for block printing	20
2.	Water basins	05
3.	Screens	
4.	Blankets & plastics for tables	25
5.	Burners	15
6.	Plastics tabs (different sizes)	15
7.	Iron	02
8.	Ironing stand	02
9.	Trays	25
10.	Saucepans for dyes	15
11.	Double boilers for wax	15
12.	Wooden framers for brush painting (silk)	25
13.	Wooden frames (for batik)	25
14.	Teachers chair	01
15.	Cupboards	03
16.	Washing area for screens with hose	02

MINIMUM QUALIFICATION OF INSTRUCTORS

1. B.Sc. (Home Economics)
2. BFA
3. BFD
4. DDM + 2 years experience

EMPLOYABILITY OF PASSOUTS

- Pass outs can establish their private business
- Pass outs can work as free lancers patterns developer
- Pass outs can work as pattern developers & skilled workers in textile mills
- Pass outs can work as technician, apprentice & assistants in schools and colleges

REFERENCE BOOKS

1. Fish, j. (2005). Designing and printing textiles, crowood
2. Jackson, L. (2007). Twentieth century pattern design. Princeton architectural press
3. Joyee, C. (1997). Textile design: the complete guide to printed textiles for apparel and home furnishings. Watson-Guptill.
4. Naik, S.D. and Wilson J. (2006). Surface designing of textile fabrics. New age international.
5. Schwalback, M.V. and schwalback, J.A. (1980). Silk-screen printing for artist & craftsmen. Courier dover publications.

STANDING OPERATING PROCEDURE FOR EVALUATION OF SHORT COURSE STUDENTS

Following procedure will be followed for the evaluation of students of short courses: -

1 Admitted students will be registered with the Board of Technical Education of **respective province** within one month after the last date of admission.

2 The testing of the students shall be carried out as follows: -

a. **Grading System (Theory & Practical).**

A+	Grade from 80% and above.
A	Grade from 70% to 79%.
B	Grade from 60% to 69%
C	Grade from 50% to 59%
F	Less than 50%.
Fail	Below 40% in Theory & 50% in Practical

- Candidate has to pass both Theory & Practical

b. **Attendance.**

Students below 80% attendance will not be admissible to appear in examination.

c. **Examining Body.**

Board of Technical Education of **respective province** will be the Testing and Evaluation Authority.

d. **Testing.**

1. **Conduct.** The testing shall be conducted in respective institutions under overall supervision of **Board of Technical Education**

2. **Methodology.**

Following testing methodology will be adopted:-

(a)	Class attendance / participation	=	10%
(b)	Sessional Performance (Practical exercises/ quizzes / assignments).	=	40%
(c)	Final Exams.		
	i Theory	=	10%
	ii Practical.	=	40%
	Total	=	<u>100%</u>

3 The institute concerned will forward the result of students to Board of **Technical Education** on CURR/F-1 form (Attached) within seven days of termination of course.

4 **Board of Technical Education** will process the result carrying out its scrutiny / vetting and issue certificate to successful candidates as per specimen attached.

5 The secretary BTE will also coordinate for the endorsement of the said certificate by General Manager (Academic).

MEMBERS OF NATIONAL CURRICULUM AND REVIEW COMMITTEE

- S.M. Qutub, Quality and Management Services Director, UMT, Lahore
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