

Maharashtra State Board of Technical Education (MSBTE)**I – Scheme****II – Semester Course Curriculum**Course Title: **Pattern Making**

(Course Code:)

Diploma programme in which this course is offered	Semester in which offered
Fashion And Clothing Technology	second

1. RATIONALE

Pattern making is the heart of garment industry. The student should be able to develop pattern by following appropriate process. Knowledge on human body measurement and creation of pattern for customers plays vital role in fashion industry. Skills in simple pattern making are to be developed in students through this course. Student should be able to apply the science of measuring human sizes and creating pattern from the measurement. Students should develop commercial pattern from the basic pattern.

2. COMPETENCY

The aim of this course is to help the student to attain the following industry identified competency through various teaching learning experiences:

- **Create garment patterns by drafting methods.**

3. COURSE OUTCOMES (COs)

The theory, practical experiences and relevant soft skills associated with this course are to be taught and implemented, so that the student demonstrates the following industry oriented COs associated with the above mentioned competency:

- Measure body, dummy and garments by selecting relevant measurement techniques
- Interpret the principles and symbols used in pattern making.
- Draft the specified basic bodice and adapted patterns Sleeves & Collars for kids wear.
- Manipulate different Patterns by using Basic bodice block for women with different sleeves & Collars.
- Draft the basic men's Trouser & Basic shirt with different collars & Sleeves.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T+P)	Examination Scheme				
				Theory Marks		Practical Marks		Total Marks
L	T	P	C	ESE	PA	ESE	PA	
2	-	4	6	70	30*	50	50	200

(*): Under the theory PA, Out of 30 marks, 10 marks are for micro-project assessment to facilitate integration of COs and the remaining 20 marks is the average of 2 tests to be taken during the semester for the assessment of the cognitive domain LOs required for the attainment of the COs.

Legends: L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P - Practical; C – Credit, ESE - End Semester Examination; PA - Progressive Assessment

5. COURSE MAP (with sample COs, Learning Outcomes i.e. LOs and topics)

This course map illustrates an overview of the flow and linkages of the topics at various levels of outcomes (details in subsequent sections) to be attained by the student by the end of the course, in all domains of learning in terms of the industry/employer identified competency depicted at the centre of this map.

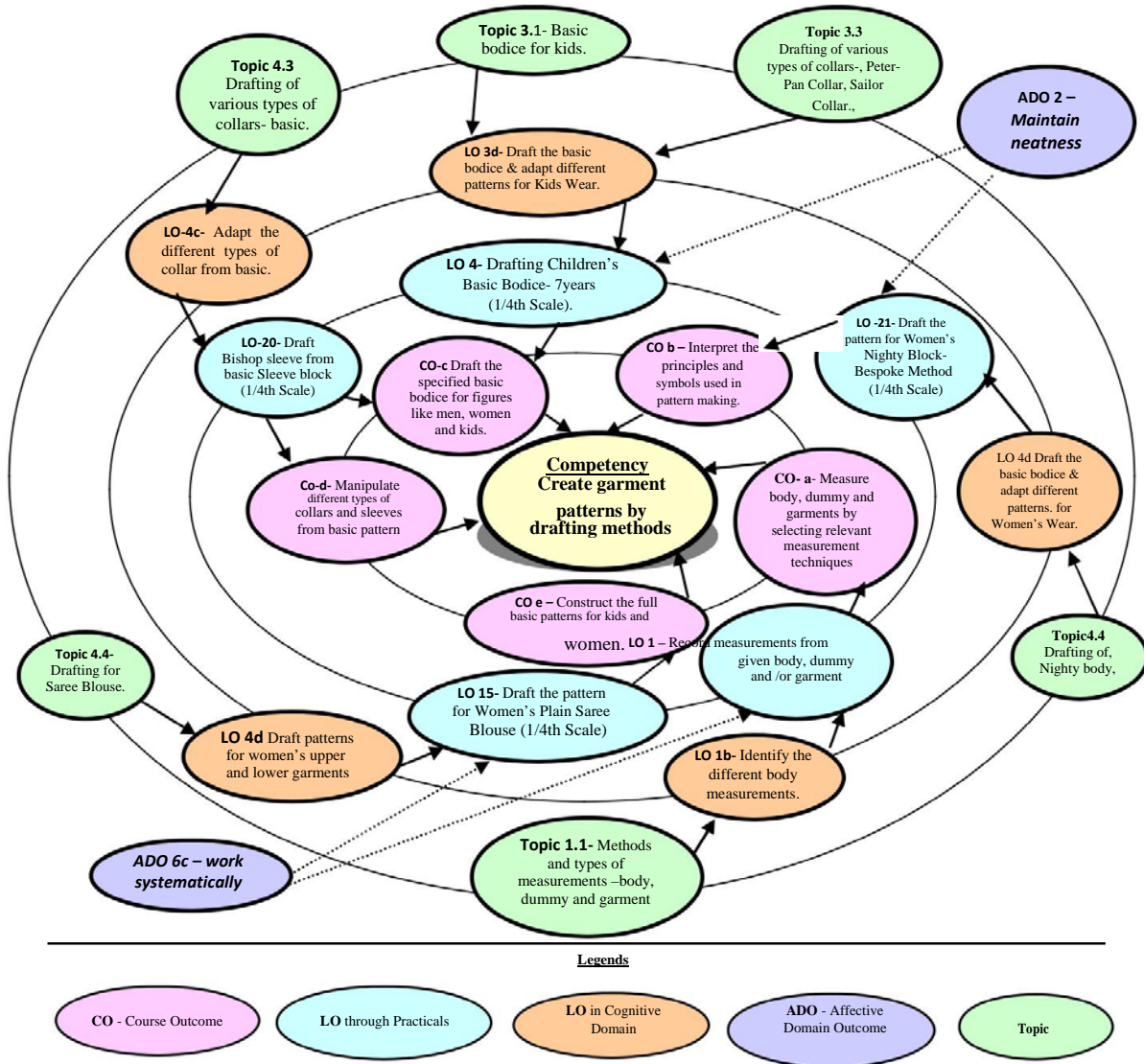


Figure 1 - Course Map

6. SUGGESTED PRACTICALS/ EXERCISES

The practicals/exercises/tutorials in this section are psychomotor domain LOs (i.e.sub-components of the COs), to be developed and assessed in the student to lead to the attainment of the competency.

S. No.	Practical Exercises (Learning Outcomes in Psychomotor Domain)	Unit No.	Approx. Hrs. Required
1.	Record measurements from given body, dummy and/ or garment.	I	02*

S. No.	Practical Exercises (Learning Outcomes in Psychomotor Domain)	Unit No.	Approx. Hrs. Required
2.	Demonstrate pattern making tools and symbols.	II	02*
3.	Draft Children's Basic Bodice- 7years (1/4th Scale)- Part I	III	02*
4.	Draft Children's Basic Bodice- 7years (1/4th Scale)-Part II	III	02
5.	Draft Plain sleeve of Children's Basic Bodice- 7years (1/4th Scale)	III	02
6.	Draft the pattern for A-line frock (1/4th Scale) Part I	III	02
7.	Draft the pattern for A-line frock (1/4th Scale) Part II	III	02
8.	Adapt the Puff sleeve from the basic sleeve.	III	02
9.	Draft the pattern for Waist-Line Frock (1/4th Scale) Part-I	III	02
10.	Draft the pattern for Waist-Line Frock (1/4th Scale) Part-II	III	02
11.	Draft the pattern for Boys Shorts (1/4th Scale) Part-I	III	
12.	Draft the pattern for Boys Shorts (1/4th Scale) Part-II	III	02
13.	Draft the pattern for Sun suit (1/4th Scale) Part-I	III	
14.	Draft the pattern for Sun suit (1/4th Scale) Part-II	III	02
15.	Draft the pattern for Female Basic Skirt (1/4th Scale)-Part-I	IV	02*
16.	Draft the pattern for Female Basic Skirt (1/4th Scale)-Part-II	IV	02
17.	Draft the pattern for Female Close Fitting Basic Bodice (1/4th Scale)-Part-I	IV	02
18.	Draft the pattern for Female Close Fitting Basic Bodice (1/4th Scale)-Part-II	IV	02
19.	Draft the basic Sleeve block for Close Fitting Basic Bodice (1/4th Scale)-	IV	02
20.	Draft Bishop sleeve from basic Sleeve block (1/4th Scale)	IV	02
21.	Draft the pattern for women's Nighty Block by using Bespoke method (1/4th Scale)-Part-I	IV	02
22.	Draft the pattern for women's Nighty Block by using Bespoke method (1/4th Scale)-Part-II	IV	02
23.	Draft the pattern for Kameez for Women (1/4th Scale)	IV	02
24.	Draft the pattern for Salwar for women (1/4th Scale)	IV	02
25.	Draft the pattern for Women's Plain Saree Blouse (1/4th Scale) Part-I	IV	02
26.	Draft the pattern for Women's Plain Saree Blouse (1/4th Scale) Part-II	IV	02
27.	Draft the pattern for Men's basic Shirt Block (1/4th Scale)	V	02*
28.	Draft the pattern for Men's basic Sleeve with Cuff & Collar (1/4th Scale)	V	02
29.	Draft the pattern for Men's Flat Front Trousers Block (1/4th Scale)-Part-I	V	02
30.	Draft the pattern for Men's Flat Front Trousers Block (1/4th Scale)-Part-II	V	02

Note

- i. A suggestive list of practical LOs is given in the above table, more such practical LOs can be added to attain the COs and competency. A judicious mix of minimum 24 or more practical LOs/tutorials need to be performed, out of which, the practicals marked as '*' are compulsory, so that the student reaches the 'Precision Level' of Dave's 'Psychomotor Domain Taxonomy' as generally required by the industry.

ii. Hence, the 'Process' and 'Product' related skills associated with each LO of the laboratory/workshop/field work are to be assessed according to a suggested sample given below:

S. No.	Performance Indicators	Weightage in %
1	Use of measurement tools.	10
2	Follow the drafting principles correctly.	30
3	Use of pattern making tools properly.	20
4	Indicate the symbols and landmarks in pattern drafting.	10
5	Presentation of output.	10
7	Answer to sample questions	10
8	Submit report in time	10
	Total	100

Additionally, the following affective domain LOs (social skills/attitudes), are also important constituents of the competency which can be best developed through the above mentioned laboratory/field based experiences:

- a. Follow safety practices.
- b. Practice good housekeeping.
- c. Demonstrate working as a leader/a team member.
- d. Maintain tools and equipment.
- e. Follow ethical practices.

The development of the attitude related LOs of Krathwohl's 'Affective Domain Taxonomy', the achievement level may reach:

- 'Valuing Level' in 1st year
- 'Organising Level' in 2nd year
- 'Characterising Level' in 3rd year.

7. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

S. No.	Equipment/Instruments/Other resources name with Broad Specifications	Experiment S.No.
1	Standard dummies	1
2	Measuring Tools -Scale Triangle, measuring tape, flexi tape, French curve Tracing Tools - Tailors Chalk Tracing paper, Carbon Paper, Tracing wheel. Cutting Tool - Scissors, Shears, Pinking shears.	1, 3 to 30
3	Stationary material such as pencil, eraser, scale, Brown Paper .Drafting Book(Journal).	All

8. UNDERPINNING THEORY COMPONENTS

The following topics/subtopics should be taught and assessed in order to develop LOs in cognitive domain for achieving the COs to attain the identified competency.

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
Unit – I Measurements	1a. Choose the correct method of measurement. 1b. Taking relevant body measurements for a given garment. 1c. Identify for the given standard size charts from different countries. 1d. Select the appropriate measuring tools.	1.1 Methods of measurements – Measuring from body, dummy and readymade garment. 1.2 Measurement Types- vertical, horizontal and circumferential measurements 1.3 Standard measurement charts. 1.4 Measuring Tools- Measuring tape, ruler, L-scale, 1/4th scale, flexi tape 1.5 Tracing Tool- Tracing Wheel, Tailors Chalk, Carbon Paper, Tracing Paper, Marking Pen & Pencils. 1.6 Cutting Tools- Scissors, Pinking shear, notcher
Unit– II Techniques of Pattern Making	2a. Interpret principles involved for the given pattern making. 2b. Interpret the give pattern making terminologies. 2c. Describe with sketches the symbols and landmarks for the given pattern making. 2d. Choose relevant techniques and methods for the given patterns.	2.1 Introduction to pattern making- definitions Introduction to pattern Making Principles 2.2 Basic terminologies- selvedge, grain-line, on-grain, cross-grain, bias-grain, length-grain, true-bias, bust point, Dart 2.3 Symbols and landmark terms used in pattern making 2.4 Techniques in pattern making- Drafting & Draping techniques 2.5 Methods of pattern making- bespoke, industrial method. 2.6 Types of patterns-Basic block & adaptation
Unit– III Drafting for Kids Wear	3a. Interpret the specified concepts involved in basic bodice drafting for Boys & Girls. 3b. Adapt the different types of sleeves. 3c. Adapt the different types of collars. 3d. Draft the basic bodice a adapt different patterns for Kids Wear.	3.1 Introduction to various garment components: Sleeve, Collar, Fly, Basic bodice for kids, 3.2 Drafting of various types of sleeves- Plain Sleeve, Puff Sleeve, Bell Sleeves, Tulip. 3.3 Drafting of various types of collars-, Peter-Pan Collar, Sailor Collar., 3.4 Drafting of A-line frock, Drafting of Waist line frock, Drafting of Boy’s Shorts.
Unit– IV Drafting for Women’s Wear	4a. Interpret the specified concepts involved in basic bodice drafting for Women’s Wear. 4b. Adapt the different types of sleeves. 4c. Adapt the different types of collars 4d. Draft the basic bodice &	4.1 Close fitting bodice block for women, Introduction to various garment components -Sleeves & Collars 4.2 Drafting of various types of sleeves- Plain Sleeve, Cap Sleeve Bishop Sleeve, Leg of mutton sleeve, Kimono, Dolman, Megyar sleeve, 4.3 Drafting of various types of collars-, Stand Collar, Shawl Collar.

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
	adapt different patterns for Women's Wear.	4.4 Drafting of Kameez, Salwar, Nighty, Drafting of Saree Blouse.
Unit– V Drafting for Men's Wear	5a. Draft the basic shirt block for men. 5b. Adapt the different types of sleeves & collars. 5c. Draft Trouser Block.	5.1 Drafting of Men's Shirt block. 5.2 Drafting of sleeves- Shirt Sleeve, Raglan Sleeves 5.3 Drafting of Collars- Shirt Collar, Roll Collar. 5.4 Drafting of Men's Trouser Block.

Note: To attain the COs and competency, above listed Learning Outcomes (LOs) need to be undertaken to achieve the 'Application Level' of Bloom's 'Cognitive Domain Taxonomy'

9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Measurements	04	02	06	-	08
II	Techniques of Pattern Making	04	02	02	06	10
III	Drafting for Kids Wear	08	02	06	08	16
IV	Drafting for Women's Wear	08	02	06	10	18
V	Drafting for Men's Wear.	08	02	06	10	18
Total		32	10	26	34	70

Legends: R=Remember, U=Understand, A=Apply and above (Bloom's Revised taxonomy)

Note: This specification table provides general guidelines to assist student for their learning and to teachers to teach and assess with respect to attainment of LOs. The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may vary from above table.

10. SUGGESTED STUDENT ACTIVITIES

Other than the classroom and laboratory learning, following are the suggested student-related *co-curricular* activities which can be undertaken to accelerate the attainment of the various outcomes in this course:

- Student will maintain a separate notebook for various pattern making terminologies and symbols used in fashion industry.
- Students will visit garment factory to learn about the importance of garment measurements for domestic and export purpose.
- Students will visit boutique to learn about the importance of garment measurements.
- Students will prepare basic patterns for their family members of different age groups.

11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

- Guide student(s) in measuring from various dummies.
- Show video/animation films for taking measurements.
- Demonstrate the use of French curve.
- Provide standard charts developed by experienced faculty to teach standard symbols.

- e. Massive open online courses (**MOOCs**) may be used to teach various topics/sub topics.
- f. **'L' in item No. 4** does not mean only the traditional lecture method, but different types of teaching methods and media that are to be employed to develop the outcomes.
- g. About **15-20% of the topics/sub-topics** which is relatively simpler or descriptive in nature is to be given to the students for **self-directed learning** and assess the development of the LOs/COs through classroom presentations (see implementation guideline for details).
- h. With respect to item No.10, teachers need to ensure to create opportunities and provisions for **co-curricular activities**.
- i. Guide student(s) in undertaking micro-projects.

12. SUGGESTED LIST OF MICRO PROJECTS

Only one micro-project is planned to be undertaken by a student assigned to him/her in the beginning of the semester. S/he ought to submit it by the end of the semester to develop the industry oriented COs. Each micro-project should encompass two or more COs which are in fact, an integration of practicals, cognitive domain and affective domain LOs. The micro-project could be industry application based, internet-based, workshop-based, laboratory-based or field-based. Each student will have to maintain dated work diary consisting of individual contribution in the project work and give a seminar presentation of it before submission. The total duration of the micro-project should not be less than **16 (sixteen) student engagement hours** during the course.

In the first four semesters, the micro-project could be group-based. However, in higher semesters, it should be individually undertaken to build up the skill and confidence in every student to become problem solver so that s/he contributes to the projects of the industry. A suggestive list is given here. Similar micro-projects could be added by the concerned faculty:

- b. **Measurements:** Each batch of students will compare standard measurements charts between any two countries.
- c. **Techniques of pattern making:** Each student will compare the methods of pattern making.
- d. **Drafting of basic bodice:** Each student will draft the basic bodice for his/her own measurements.
- e. **Drafting of garment components:** Each student will sketch any five adapted sleeve and collar and draft the same for given measurement.
- f. **Drafting of basic garment:** Each student will draft any two basic garments for his/her own measurements.

13. SUGGESTED LEARNING RESOURCES

S. No.	Title of Book	Author	Publication
1.	Zarapkar System of Cutting	Zarapkar, K.R.	Sale Publishers, Bombay ISBN: 9788124301999
2.	Pattern Making for fashion Design	Armstrong, Helen Joseph	Harper Collins, LA ISBN: 9780136069348
4.	Metric Pattern Cutting	Aldrich, Winifred	Balckwell Science Ltd.,London ISBN: 978-1-4443-0929-4
5.	Pattern Cutting Made Easy	Holman, Gillian	Balckwell Science Ltd.,London ISBN: 9780713480931

S. No.	Title of Book	Author	Publication
6.	More Dress Pattern Designing	Bray, Natalie	Balckwell Science Ltd., London ISBN: 978-0632065028
7.	Master patterns and grading for women's outsize	Cooklin, Gerry	Balckwell Science Ltd. London ISBN: 9780632039159
8.	Master patterns and grading for men's outsize	Cooklin, Gerry	Balckwell Science Ltd. London ISBN: 9780632039158

14. SOFTWARE/LEARNING WEBSITES

- a. www.fibert2fashion.com
- b. www.onlineclothingstudy.com
- c. www.youtube.com
- d. www.gerbertechnology.com
- e. www.biep.co.in