

**MOTHER TERESA WOMEN'S UNIVERSITY  
KODAIKANAL – 624 102**

**DEPARTMENT OF HOMESCIENCE**

**M.Sc. TEXTILES AND CLOTHING**

**Curriculum Framework, Syllabus, and Regulations**

**(Based on TANSCHÉ Syllabus under Choice Based Credit System – CBCS)**

**(For the candidates to be admitted from the Academic Year 2023-2024)**

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**Mother Teresa Women's University,  
Kodaikanal  
Department of Home Science  
M.Sc. Textiles and Clothing**

### **1. About the Department**

The Primary Purpose of the Home Science Department is to provide opportunities for students to pursue a quality education in Home Science. Importance is placed on providing opportunities within the curricula for development of enhanced skills in critical thinking, communication, leadership and computer literacy. The Department of Home Science also seeks to provide students opportunities for growth beyond the classroom through a wide range of extracurricular activities, programmes and services through the maintenance of environment, cultural and intellectual diversity. The Courses offered under the Department of Home Science prevails in all three Research and Extension centres such as Madurai, Chennai and Coimbatore seeking opportunities for developing Academic Excellence, the students have more scope to get the exposure for research, projects, internship, industrial visit, and placement.

### **2. Programme Educational Objectives (PEOs)**

- PEO1:** To provide experience in advance textile fabrication techniques
- PEO2:** To enable the learners to apply environment friendly techniques in textile production and finishing
- PEO3:** To motivate the learners to apply knowledge in textile testing and quality control methods.
- PEO4:** To instill knowledge to introduce sustainable practices in textile and apparel industry
- PEO5:** To cultivate entrepreneurial skills in textile and fashion domains

### **3. Programme Outcomes (PO)**

On completion of M.Sc. Textiles and Clothing Programme, students will be able to

PO1- Have complete knowledge in the field of Textiles and Clothing

PO2- Apply their professional knowledge and their research ideas for developing innovative fashion trends and creative products.

PO3-Acquire dexterity for self-development and competency

PO4- Understand current scenario of fashion and apparel design and adapt themselves to the changes in global fashion and commercial market.

PO5- Understand business relations and apply technical and computer knowledge, statistical analytical skills, soft skills, confidence, ethics and moral values.

PO6- Get qualified for industrial needs and start up units by providing professional skills

PO7- Explore research interest with creative skills towards sustainable environment practices.

#### 4. Programme Specific Outcomes (PSOs)

On completion of M.Sc. Textiles and Clothing Programme, students will be able to

PSO1 – Acquire research knowledge in Textile, Apparel and Fashion production techniques

PSO2 – Gain expertise in areas of fashion and design as to adopt current and future trends

PSO3 – Acquire entrepreneurial skills in the field of textiles, apparel and fashion

PSO4 – Excel in the area of computer and soft skills as per industrial needs and start-ups.

PSO5 – Acquire dexterity in the field of textile, clothing and fashion for employability

#### 5. Eligibility

Candidates who have qualified in B.Sc. Costume Design and Fashion/Textiles and Apparel Design/Textiles and Fashion Design/Fashion Design/ Textiles and Clothing or any B.Sc./ B.Voc. Degree related to Textiles and Fashion disciplines are eligible to register for the Degree of Master of Science.

#### 6. General Guidelines for PG Programme

- i. **Duration:** The Programme shall extend through a period of 4 consecutive semesters and the duration of a semester shall normally be 90 days or 450 hours. Examinations shall be conducted at the end of each semester for the respective subjects.
- ii. **Medium of Instruction:** English

**7. Evaluation (25+75):** Evaluation of the candidates shall be through Internal Assessment and External Examination for Theory and Practical.

##### 7.1. Evaluation Pattern

EVALUATION PATTERN		Maximum Marks (Theory & Practical)	Minimum Marks (Theory & Practical)
<b>Internal Evaluation</b>	Continuous Internal Assessment Test	<b>25 Marks</b>	<b>13 Marks</b>
	Assignments / Snap Test / Quiz		
	Seminars		
	Attendance and Class Participation		
<b>External Evaluation</b>	End Semester Examination	<b>75 Marks</b>	<b>38 Marks</b>
<b>Total</b>		<b>100 Marks</b>	<b>50 Marks</b>

**\*Minimum credits required to pass: 91**

## 7.2. Internal Assessment-CIA

There shall be three tests conducted by the faculty concerned and the average of the best two can be taken as the Continuous Internal Assessment (CIA) for a maximum of 25 marks. The duration of each test shall be one / one and a half hour.

**7.3. End Semester Examination (Theory):** Max. Marks: 75 Time: 3 hrs.

## 7.4. Written Examination Question Paper Pattern

### Theory Paper (Bloom's Taxonomy based)

(Common for PG Programmes)

<b>Intended Learning Skills</b>	<b>Maximum 75 Marks Passing Minimum: 50% Duration: Three Hours</b>
Memory Recall/Example/ Counter Example / Knowledge about the Concepts/Understanding	<b>Part–A (10x2=20Marks)</b>
	Answer ALL questions <b>Each Question carries 2 marks</b> Two questions from each Unit <b>Question 1 to Question 10</b>
Descriptions/Application (problems)	<b>Part–B (5x5=25Marks) Answer</b>
	<b>ALL questions</b> <b>Each question carries 5 Marks</b> <b>Either - or Type</b> Both parts of each question from the same Unit <b>Question 11 (a) or 11(b)</b> to <b>Question 15(a) or 15(b)</b>
Analysis/Synthesis / Evaluation	<b>Part-C (3x 10 = 30 Marks)</b>
	<b>Answer any THREE questions</b> <b>Each question carries 10 Marks</b> There shall be FIVE questions covering all the five units <b>Question 16 to Question 20</b>

**Each question should carry the course outcome and cognitive level For instance,**

[CO1 : K2] Question xxxx

[CO3 : K1] Question xxxx

## 7.5. Methods of Assessment

METHODS OF ASSESSMENT	
<b>Remembering (K1)</b>	<ul style="list-style-type: none"><li>• The lowest level of questions requires students to recall information from the course content</li><li>• Knowledge questions usually require students to identify information in the text book.</li></ul>
<b>Understanding (K2)</b>	<ul style="list-style-type: none"><li>• Understanding of facts and ideas by comprehending organizing, comparing, translating, interpolating and interpreting in their own words.</li><li>• The questions go beyond simple recall and require students to combine data together</li></ul>
<b>Application (K3)</b>	<ul style="list-style-type: none"><li>• Students have to solve problems by using / applying a concept learned in the classroom.</li><li>• Students must use their knowledge to determine a exact response.</li></ul>
<b>Analyze (K4)</b>	<ul style="list-style-type: none"><li>• Analyzing the question is one that asks the students to break down something into its component parts.</li><li>• Analyzing requires students to identify reasons causes or motives and reach conclusions or generalizations.</li></ul>
<b>Evaluate (K5)</b>	<ul style="list-style-type: none"><li>• Evaluation requires an individual to make judgment on something.</li><li>• Questions to be asked to judge the value of an idea, a character, a work of art, or a solution to a problem.</li><li>• Students are engaged in decision-making and problem – solving.</li><li>• Evaluation questions do not have single right answers.</li></ul>
<b>Create (K6)</b>	<ul style="list-style-type: none"><li>• The questions of this category challenge students to get engaged in creative and original thinking.</li><li>• Developing original ideas and problem solving skills</li></ul>

## 8. Project

### 8.1. Project Report

A student should select a topic for the Project Work at the end of the third semester itself and submit the Project Report at the end of the fourth semester. The Project Report shall not exceed 40 typed pages in Times New Roman font with 1.5 line space.

### 8.2. Project Evaluation

There is a Viva Voce Examination for Project Work. The Guide and an External Examiner shall evaluate and conduct the Viva Voce Examination. The Project Work carries 100 marks (Internal: 25 Marks; External (Viva): 75 Marks).

## 9 . Conversion of Marks to Grade Points and Letter Grade (Performance in a Course/Paper)

Range of Marks	Grade Points	Letter Grade	Description
90 – 100	9.0 – 10.0	O	Outstanding
80-89	8.0 – 8.9	D+	Excellent
75-79	7.5 – 7.9	D	Distinction
70-74	7.0 – 7.4	A+	Very Good
60-69	6.0 – 6.9	A	Good
50-59	5.0 – 5.9	B	Average
00-49	0.0	U	Re-appear
ABSENT	0.0	AAA	ABSENT

### 10. Attendance

Students must have earned 75% of attendance in each course for appearing for the examination. Students with 71% to 74% of attendance must apply for condonation in the Prescribed Form with prescribed fee. Students with 65% to 70% of attendance must apply for condonation in the Prescribed Form with the prescribed fee along with the Medical Certificate. Students with attendance less than 65% are not eligible to appear for the examination and they shall re-do the course with the prior permission of the Head of the Department, Principal and the Registrar of the University.

### 11. Maternity Leave

The student who avails maternity leave may be considered to appear for the examination with the approval of Staff i/c, Head of the Department, Controller of Examination and the Registrar.

### 12. Any Other Information

In addition to the above mentioned regulations, any other common regulations pertaining to the PG Programmes are also applicable for this Programme.

### 13. Faculty Course File Structure-Contents

<b>a.</b>	Academic Schedule	<b>q.</b>	Laboratory Experiments related to the Courses
<b>b.</b>	Students Name List	<b>r.</b>	Internal Question Paper
<b>c.</b>	Time Table	<b>s.</b>	External Question Paper
<b>d.</b>	Syllabus	<b>t.</b>	Sample Home Assignment Answer Sheets
<b>e.</b>	Lesson Plan	<b>u.</b>	Three best, three middle level and three average Answer sheets
<b>f.</b>	Staff Workload	<b>v.</b>	Result Analysis (CO wise and whole class)
<b>g.</b>	Course Design (content, Course Outcomes (COs), Delivery method, mapping of COs with Programme Outcomes (POs), Assessment Pattern interms of Revised Bloom's Taxonomy).	<b>w.</b>	Question Bank for Higher studies Preparation (GATE/Placement)
<b>h.</b>	Sample CO Assessment Tools	<b>x.</b>	List of mentees and their academic achievements
<b>i.</b>	Faculty Course Assessment Report (FCAR)		
<b>j.</b>	Course Evaluation Sheet		
<b>k.</b>	Teaching Materials (PPT, OHP etc)		
<b>l.</b>	Lecture Notes		
<b>m.</b>	Home Assignment Questions		
<b>n.</b>	Tutorial Sheets		
<b>o.</b>	Remedial Class Record, if any		
<b>p.</b>	Projects related to the Course		



## 14. COMMON TEMPLATE FOR ALL PG PROGRAMMES AS PER TANSICHE-2023-24

Semester-I	Credits	Hours	Semester-II	Credit	Hours	Semester-III	Credit	Hours	Semester-IV	Credit	Hours
1.1. Core-I	5	7	2.1. Core-IV	5	6	3.1. Core-VII	5	6	4.1. Core-XI	5	6
1.2 Core-II	5	7	2.2 Core-V	5	6	3.2 Core-VII	5	6	4.2 Core-XII	5	6
1.3 Core – III	4	6	2.3 Core – VI	4	6	3.3 Core – IX	5	6	4.3 Project with viva voce	7	10
1.4 Discipline Centric Elective -I	3	5	2.4 Discipline Centric Elective – III	3	4	3.4 Core – X	4	6	4.4 Elective - VI (Industry / Entrepreneurshi p) 20% Theory 80% Practical	3	4
1.5 Generic Elective-II:	3	5	2.5 Generic Elective - IV:	3	4	3.5 Discipline Centric Elective - V	3	3	4.5 Skill Enhancement course / Professional Competency Skill	2	4
			2.6 NME I	2	4	3.6 NME II	2	3	4.6 Extension Activity	1	
						3.7 Internship/ Industrial Activity	2	-			
	<b>20</b>	<b>30</b>		<b>22</b>	<b>30</b>		<b>26</b>	<b>30</b>		<b>23</b>	<b>30</b>
<b>Total Credit Points -91</b>											

## 15. Templates for Semesters

### Choice Based Credit System (CBCS), Learning Outcomes Based Curriculum Framework (LOCF) Guideline Based Credits and Hours Distribution System for all Post – Graduate Courses including Lab Hours

#### SEMESTER-I

S.No.	Course Code	List of Courses	Credits	Hours		CIA	ESE	Total
				L	P			
1.	P23TCT11	Core – I	5	7	-	25	75	100
2.	P23TCT12	Core – II	5	7	-	25	75	100
3.	P23TCP11	Core – III	4	6	-	25	75	100
4.	P23TCE1A/ P23TCE1B/ P23TCE1C	Elective – I (Discipline Centric)	3	5	-	25	75	100
5.	P23WSG11	Generic Course – 1: Women Empowerment	3	5	-	25	75	100
		<b>Total</b>	<b>20</b>	<b>30</b>		<b>-</b>	<b>-</b>	<b>500</b>

#### SEMESTER-II

S.No.	Course Code	List of Courses	Credits	Hours		CIA	ESE	Total
				L	P			
6.	P23TCT23	Core – IV	5	6	-	25	75	100
7.	P23TCT24	Core – V	5	6	-	25	75	100
8.	P23TCP22	Core – VI	4	6	-	25	75	100
9.	P23TCE2A/ P23TCE2B/ P23TCE2C	Elective – III (Discipline Specific)	3	4	-	25	75	100
10.	P23CSG22	Generic Course – 2: Cyber Security	3	4	-	25	75	100
11.	P23TCS1A/ P23TCS1B/ P23TCS1C	NME - Skill Enhancement Course -1 (SEC-1):	2	4	-	25	75	100
		<b>Total</b>	<b>22</b>	<b>30</b>		<b>-</b>	<b>-</b>	<b>600</b>

## M. Sc. TEXTILES AND CLOTHING -SYLLABUS

Semester wise

Structure

**SEMESTER I**

S. No.	Course Code	Course Components	Name of Course	Inst. Hours	Credits	Exam HRS	Max. Marks	
							CI A	External
1	P23TCT11	Core -I	Indian Textile and Apparel Industry	7	5	3	25	75
2	P23TCT12	Core -II	Technical textiles	7	5	3	25	75
3	P23TCP11	Core-III Practical-I	Advanced Pattern Making Practical	6	4	3	25	75
4	P23TCE1A/ P23TCE1B/ P23TCE1C	Elective –I (Discipline Specific)	(A) Surface Ornamentation Practical (B) Apparel Machinery Operations and Maintenance (C) Fashion Industry and Sustainability	5	3	3	25	75
5	P23WSG11	Generic Course - 1	Women Empowerment	5	3	3	25	75
			<b>Total Credits</b>	30	<b>20</b>		<b>600</b>	

**SEMESTER II**

S .No.	Course code	Course Components	Name of Course	Inst. Hours	Credits	Exam HRS	Max. Marks	
							CI A	External
1	P23TCT23	Core -IV	Eco Textiles and Sustainability	6	5	3	25	75
2	P23TCT24	Core -V	Textile Testing	6	5	3	25	75
3	P23TCP22	Core –VI Practical- II	Textile and Apparel Testing Practical	6	4	3	25	75
4	P23TCE2A/ P23TCE2B/ P23TCE2C	Elective –III	(A) Fabric Draping and Construction Practical (B) Fashion Retailing (C) Communication for Fashion Business	4	3	3	25	75
5	P23CSG22	Generic Course-2	Cyber security	4	3	3	25	75
6	P23TCS1A / P23TCS1B / P23TCS1C	(NME) - Skill Enhancement Course-1	(A) Surface ornamentation Practical (B) Ornaments and Accessory Designing practical (C) Hand Embroidery	4	2	3	25	75
			<b>Total</b>	<b>30</b>	<b>22</b>			<b>600</b>

Course Code	P23TCT11	SEMESTER I	YEAR-I	Credits	L	T	P	Hrs	
<b>CORE I</b>		<b>INDIAN TEXTILE AND APPAREL INDUSTRY</b>		5	7	-	-	7	
<b>Cognitive level</b>	<b>K1- Recall; K2 – Understand; K3 – Analyze; K4 – Apply;</b>								
<b>Learning Objectives</b>	<ol style="list-style-type: none"> <li>The students learn about the recent advancements of Indian Textile and Apparel Industry, Notable Research accomplishments,</li> <li>Understand the position of textile Clusters in India</li> <li>Understand the trends in E-Commerce of textile and apparel business</li> </ol>								
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to								
	<b>S. No</b>	<b>Out comes</b>					<b>Domains of Learning</b>		
							<b>Cognitive</b>		
	CO1	Interpret the Current Statistics of cotton, sericulture, jute, woollen, manmade & filament yarn with reference to production and consumption of fibers, yarns and fabrics					K2		
	CO2	Review the Non-Woven Product developments and market potential in India					K2		
	CO3	Identify the major initiatives taken by the clusters for the growth of the Industry					K2		
	CO4	Demonstrate the registration process as a vendor in e-com website.					K3		
	CO5	Compare the performance of exports and domestic market of Textiles & Clothing sector					K4		
CO6	Summarize the export opportunities of cotton, sericulture, jute, woollen, manmade & filament yarn Industries and Textiles & Clothing industry					K5			
<b>Units</b>	<b>Course Contents</b>								
<b>Unit I</b>	<b>Outlook of Indian Textile &amp; Apparel Industry</b> <b>Overview</b> and Growth of Indian Textile Industry, Current position of textile industry in India, Vision India, Structure of Indian textile industry, challenges faced by textile industry in India, Latest government policies and schemes for promoting textile industry in India.								
<b>Unit-II</b>	<b>Recent Progresses of Cotton and Sericulture Industry</b> Cotton Textile Industry: Overview of cotton industry in India, key markets and export destinations, Production, Area and Productivity, Cotton consumption, Cotton Trade, cotton prices, Major cotton producing countries. Sericulture Industry: Introduction, world silk production, Production and consumption of raw silk, performance of sericulture sector, Research and Development.								
<b>Unit-III</b>	<b>Recent Progresses of Jute and Woollen Industry</b> Jute Industry: Raw jute scenario, production of raw jute goods, Domestic consumption of jute goods, Export performance, Import of Raw jute and jute goods, Regulatory organizations in jute sector, major areas of Research in jute sector, Application of jute in technical textiles. Woollen Industry: Production and consumption, wool producing states, Import and export of wool, Research and development.								

<b>Unit-IV</b>	<b>Recent Progresses of Manmade &amp; filament yarn and Textiles &amp; Clothing Industry. Emerging trends in E-commerce of textile and Apparel Business</b> Manmade and Filament Yarn Industry: Production, Import and Export, growth. Textiles and Clothing industry: Recent import scenario and export performance of Textiles and Ready-Made Garments (Woven and Knits) Emerging Trends in E-Commerce of textile and apparel business, Vendor, registering as a vendor, building of own e-com website.												
<b>Unit-V</b>	<b>Recent Progresses of Non-Woven Industry, Research Associations &amp; Clusters</b> Textile Research Associations: ATIRA, BTRA, SITRA, NITRA, MANTRA, SASMIRA, IJIRA, WRA Nonwoven: Recent Development in India, Global Consumption of Non-woven, Market Potential in India, Growth Drivers of Non-woven and Market Overview Clusters: Definition, Cluster Concept, Policy framework for clusters in India, Mega Handloom Clusters, Power loom mega clusters, Tirupur Knitwear Clusters, Ludhiana Knitwear and Apparel Clusters and Karur clusters.												
<b>Textbook</b>	1. India's Textile and Apparel Industry: Growth Potential and Trade and Investment Opportunities, Sundar Shetty, U.S. International Trade Commission.2001 2. An Introduction to Sericulture, 2/E, Ganga and J.sulochanachetty, Oxford and IBH Publishing, 1997 3. The Textile Industry in India: Changing Trends and Employment Challenges, Bindhuoberoi, Oxford University Press,2016												
<b>Reference Book</b>	1. Trends in E-Business, E-Services, and E-Commerce: Impact of Technology on Goods, Services, and Business Transactions: Impact of Technology on Goods, Services, and Business Transactions Lee, In IGI Global, 30-Sep-2013 2. The Complete Book on Textile Processing and Silk Reeling Technology: H. Panda Asia Pacific Business Press Inc., Delhi 2010 3. Textile Industry of India and Pakistan Milan Sharma APH Publishing, 2006 4. Advances in Filament Yarn Spinning of Textiles and Polymers. Dong Zhang Elsevier, 15-Feb-2014												
<b>E-Reference</b>	1. Ministry of Textiles: texmin.nic.in 2. Fibre2 Fashion - Textile Magazine - August 2017 Fibre2Fashion, 01-Aug-2017												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
	CO1	S	S	S	S	S	S	M	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	M	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	M	S
	Strongly Correlating (S)							-	3 Marks				
	Moderately Correlating (M)							-	2 marks				
	Weakly Correlating (W)							-	1 Mark				
	No Correlation (N)							-	0 mark				

Course Code	P23TCT12	SEMESTER I	YEAR-I	Credits	L	T	P	Hrs	
<b>CORE II</b>		<b>TECHNICAL TEXTILES</b>		<b>5</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>7</b>	
<b>Cognitive level</b>	<b>K1 - Remember; K2 - Understand; K4 - Analyze;</b>								
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1. Learn about fibres and methods used for the production of Technical Textiles</li> <li>2. Learn in detail about the classifications of Technical Textiles</li> <li>3. Learn about the application of the Technical Textiles in various fields</li> <li>4. To study the concept and uses of technical textiles</li> </ol>								
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to								
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>		
							<b>Cognitive</b>		
	CO1	Recall the scope of Technical Textiles and its Applications in various fields					K1		
	CO2	Discuss the fibres and fabrics used in various applications of technical textiles and the products with their uses.					K2		
	CO3	Differentiate the fibres and fabrics that are suitable for Heat and flame protection and Survival textiles					K4		
	CO4	Compare the Conventional and Non-conventional fibres used in technical textiles.					K4		
	CO5	Compare the performance of various waterproof breathable fabrics like densely woven fabrics, membranes and coatings					K4		
<b>Units</b>	<b>Course Contents</b>								
<b>Unit I</b>	<p><b>Technical Textiles</b>  Introduction, definition, Applications and scope of Technical Textiles.  Developments of Technical textiles.  Technical Fibers: High – Strength and high-modulus fibers, chemical fibers and its advantages - resistant fibers, High performance fibers, Ultra-fine and novelty fibers-Uses. Difference between organic and inorganic man-made fiber.</p>								
<b>Unit-II</b>	<p><b>Medical Textiles and Agro Textiles</b>  Medical Textiles: Introduction, Fibers used, Properties, Classification-Non – Implantable, Implantable, Health care /Hygiene Products and Applications. Wearable assistants for mobile health monitoring. Recent trends in Medical Textiles.  Agro Textiles – - Introduction, fibers used in agro textiles, Types, functions and properties, role of nonwoven in agro textiles, Applications in agro Textiles.</p>								
<b>Unit-III</b>	<p><b>Build Tech and Geo Textiles</b>  Build Tech: - Introduction, fibers used, functions and properties, Characteristics and applications in architecture and in building construction. Recent advancement in build tech.  Geo textiles: - Introduction, fibers used in geo textiles, functions and properties of ego textiles. Recent developments in Geo Textiles.</p>								

<b>Unit-IV</b>	<b>Protective Textiles, InduTech and Home Textiles</b> Protective Textiles: Introduction, fibres used, functions and properties, textiles for protection- Fire Protective clothing, Heat resistant garments, Water proof materials, Ballistic resistant garments, Biological and chemical protection vests, Military protective clothing. Recent developments in protective textiles. InduTech - Introduction, fibers used - functions and properties. Applications and latest trends in its field. Home Textiles - Introduction, fibers used, functions and applications of home textiles.												
<b>Unit-V</b>	<b>Sports Textiles, Smart and Intelligent Textiles</b> Sports Textiles: Introduction, fibres used, functions, applications of Sports tech. Latest trends in Sports Tech. Smart and Intelligent Textiles – Classification - Active smart, passive smart, ultra-smart textiles and their applications- Phase change materials, shape memory polymers and its applications. Latest trends in smart and intelligent textiles.												
<b>Textbook</b>	<ol style="list-style-type: none"> <li>1. Hand book of Technical textiles, A. R. Horrocks and S. C. Anand, Wood head publishing ltd, England, 2000</li> <li>2. Technical Textiles and its Application, Dr.S.Grace Annapoorani, LASER Park Publishing House, India, 2017</li> </ol>												
<b>Reference Book</b>	<ol style="list-style-type: none"> <li>1. Textiles for Industrial Applications, R Senthil Kumar, CRC Press, 2013</li> <li>2. Textile Fibers: Developments and Innovations, Kothari, V., New Delhi: IAFL Publications, 2000.</li> <li>3. Handbook of Industrial Textiles, Sabit Adanur, Wellington Sears CRC Press ,1995</li> <li>4. Agro Textiles and its Application, Dr.S.Grace Annapoorani, Wood head publishing ltd, India , 2018</li> </ol>												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	S	S
	CO4	S	S	S	S	S	S	S	S	S	S	S	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
<p>Strongly Correlating (S) -3 Marks Moderately Correlating (M) - 2 marks Weakly Correlating (W) - 1 Mark No Correlation (N) - 0 mark</p>													



Subject Code	P23TCP11	SEMESTER I	YEAR-I	Credits	L	T	P	Hrs
<b>CORE-III PRACTICAL- I</b>		<b>ADVANCED PATTERN MAKING PRACTICAL</b>		<b>4</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>6</b>
<b>Cognitive level</b>	<b>K3 - Apply; K4 – Analyze; K6 – Create;</b>							
<b>Learning Objectives</b>	<p>The main objectives of this course are</p> <ol style="list-style-type: none"> <li>1. To study about pattern making</li> <li>2. To understand about the pattern making techniques</li> <li>3. To learn about the pattern manipulation techniques</li> <li>4. To study the flat pattern techniques</li> <li>5. To develop pattern for creative designs</li> </ol>							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>					<b>Doma Lear Cogn</b>	
	CO1	Apply the concepts of pattern making					K3	
	CO2	Analyze pattern making techniques					K4	
	CO3	Application of pattern manipulation techniques					K3	
	CO4	Relate the process flat pattern techniques for pattern modification					K4	
	CO5	Modify and develop patterns for creative designs					K6	
	<b>Course Contents</b>							
<b>I</b>	<p><b>Develop creative patterns using following pattern making techniques and principles</b></p> <p>Sketch the basic/original design and modified /creative design for pattern development</p> <p>Select a garment, list the measurements required, develop drafting instructions and draft the basic/original pattern.</p> <p>Apply drafting principles on original pattern, modify the basic pattern for new/creative design</p> <p>Present the original pattern and modified /creative pattern with their respective designs.</p> <p>Check the original pattern and modified /creative pattern for same measurements.</p>							

	Construct one garment using any one of the basic and creative pattern.	
	<ol style="list-style-type: none"> <li>1. Draft a basic pattern (any garment components /garments) and apply dart manipulation technique to shift darts from one location to another location to create designs.</li> <li>2. Draft a basic pattern (any children garments) and apply Flat pattern techniques to add fullness at top and bottom edges of the garment to create designs.</li> <li>3. Draft a basic pattern (any women’s garment) and apply Flat pattern techniques to convert darts into seams of the garment.</li> <li>4. Draft a basic pattern (any women’s /Men’s garment) and apply Flat pattern techniques to convert darts into seams forming yokes of the garment.</li> <li>5. Draft a basic pattern (any garment components /garments) and apply pattern alternations methods to increase and decrease the fullness from the original size of basic pattern.</li> </ol>	
<b>Text Book</b>	<ol style="list-style-type: none"> <li>1. Suzanne G. Marshall, HazelO. Jackson M. Sue Stanley, Mary Kefgen, Individuality in clothing Selection and Personal Appearance, Phullis Touchie Specnt, 2000.</li> <li>2. Harriet T, Mc Jimsey, “Art and fashion in clothing selection”, The Lowa State University Press, Ames, Lowa , 2016.</li> <li>3. Zarapkar K. R, System of Cutting, Navneet Publications, India, 2005.</li> </ol>	
<b>Reference Book</b>	<ol style="list-style-type: none"> <li>1. Hilary Campbell, “Designing Patterns”, Om Book Services, New Delhi, 2003.</li> <li>2. Helen Joseph, Pattern Making for Fashion Design, Armstrong Pearson Education, Delhi.2000.</li> <li>3. Kitty G. Dickerson, Inside the Fashion Business, Pearson Publications, New Jersey, Sixth Edition, 2002.</li> <li>4. MaryMathews, Practical Clothing Construction, Designing, Drafting and tailoring, Bhattarams Reprographics (P )Ltd., Chennai, Part II, 1991.</li> </ol>	

Mapping of Cos with POS & PSOs	CO/ PO	PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO 7	PS O1	PS O2	PS O3	PS O4	PS O5
	CO1	S	S	S	S	S	S	S	S	S	S	S	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	S	S
	CO4	S	S	S	S	S	S	S	S	S	S	S	S
	CO5	S	S	S	S	S	S	M	S	S	S	M	S
Strongly Correlating (S)									-	3 Marks			
Moderately Correlating (M)									-	2 marks			
Weakly Correlating (W)									-	1 Mark			
No Correlation (N)									-	0 mark			

Course Code	P23TCE1A	SEMESTER I	YEAR-I	Credits	L	T	Hrs
<b>ELECTIVE-I</b> Discipline Centric		<b>SURFACE ORNAMENTATION PRACTICAL</b>		<b>3</b>	-	-	<b>45</b>
<b>Cognitive level</b>	<b>K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b>						
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>To acquaint students with the knowledge on application of embellishments on fabric surface.</li> <li>To enrich garments using dyeing</li> <li>To impart the knowledge and skills required to design fabrics and garments using printing and painting</li> <li>To design garments through proper selection of embroidery stitches</li> <li>To identify the usage of garment accessory for enrichment of garments.</li> </ol>						
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to						
	<b>S. No</b>	<b>Outcomes</b>				<b>Domains of Learning Cognitive</b>	
	CO1	Designing garments with surface decoration				K5	
	CO2	Application of dyeing techniques on garments				K3	
	CO3	Garment designing using printing and painting				K6	
	CO4	Evaluate samples produced using embroidery				K4	
	CO5	Create designs using garment accessories				K6	
<b>Units</b>	<b>Course Contents</b>						
<b>I</b>	Develop designs on garments for surface enrichment of neckline/waist line/sleeves/bottom hem line/collars/plackets/around buttons or button hole/arm line/pockets using the below embellishment techniques.						
<b>II</b>	<p>Select any two children, Women's and men's garments suitable for designing and application of ornamentation techniques.</p> <ol style="list-style-type: none"> <li>Dyeing - Tie and dye/ Batik</li> <li>Printing – Block/Screen/Stencil</li> <li>Painting</li> <li>Embroidery -Hand/Machine</li> <li>Smocking</li> <li>Lace</li> <li>Applique</li> <li>Studs/Beads/sequins/mirror/stone</li> <li>Accessories-Buttons/elastic/cords/tapes/buckles</li> </ol>						

<b>Textbook:</b>	1. Lucinda Ganderton, Dorothy Wood, The Ultimate Book of Quilting Cross Stitch, Needle craft, Annes Publishing Ltd., London, 2005.												
<b>Reference Book:</b>	1. Munni Srivatsava and Bats for, Embroidery Techniques from East & West, London, 2005. 2. Nancy Ziemon, Machine Embroidery with confidence – A beginner’s guide Krause Publications, West Indies, 2005. 3. 4. Margo Singer, Textile Surface Decoration- Silk and Velvet, Textile handbook, A&C Black Publishers, Great Britain, 2007.												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PS O1	PS O2	PS O3	PS O4	PS O5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
	Strongly Correlating (S)									-		3 Marks	
Moderately Correlating (M)									-		2 marks		
Weakly Correlating (W)									-		1 Mark		
No Correlation (N)									-		0 mark		

Course Code	P23TCE1B	SEMESTER I	YEAR-I	Credits	L	T	P	Hrs	
<b>ELECTIVE-I</b> Discipline Centric		<b>APPAREL MACHINERY OPERATIONS AND MAINTENANCE</b>		<b>3</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>5</b>	
<b>Cognitive level</b>	<b>K1 – Recall; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate;</b>								
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1. To enable students to learn about evolution and types of sewing machineries</li> <li>2. To study different types of basic sewing machines</li> <li>3. To impart the students to understand the concepts of garment quality in stitching operations</li> <li>4. To acquaint students about the importance of In-line inspection</li> <li>5. To understand care and maintenance of sewing machines</li> </ol>								
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to								
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>		
							<b>Cognitive</b>		
	CO1	Evolution and types of sewing machineries					K1		
	CO2	Types of basic sewing machines					K2		
	CO3	Analyzation of garment quality in stitching operations					K4		
	CO4	Application of inspection techniques for In-line operations					K3		
CO5	Evaluation of maintenance of sewing machines					K5			
<b>Units</b>	<b>Course Contents</b>								
<b>Unit I</b>	<b>Introduction to Sewing Machines</b> Introduction- Evolution of the sewing machine- Types of sewing machines- Mechanical, Electrical and Computerized sewing machines. Categories of sewing machine - Domestic and Industrial sewing machines –characteristics and features.								
<b>Unit-II</b>	<b>Sewing Machines</b> Classification of sewing machines-General sewing machines and sewing machines based on technical characteristics. General- sewing machines, Special sewing machines, sewing automata, sewing systems, Numerical-controlled, robotic sewing machines. Technical -stitch type, sewing needle, feed mechanism, bed type- Characteristics and features- working principle -precautions. Advanced sewing machines in industry- sewing machine brands.								
<b>Unit-III</b>	<b>Garment quality in Stitching Operations</b> Garment quality -factors contributing quality product-raw material quality, accessories, cutting quality, Inspection procedure in sewing department, machine and sewing quality, Washing and finishing quality.								







Course Code	P23TCE1C	SEMESTER I	YEAR-I	Credits	L	T	P	Hrs
<b>ELECTIVE 1</b> Discipline Centric		<b>FASHION INDUSTRY AND SUSTAINABILITY</b>		3	5	-	-	5
<b>Cognitive level</b>	<b>K2 - Understand; K3 - Apply; K4 – Analyze; K6 - Create</b>							
<b>Learning Objectives</b>	<p>The main objectives of this course are:</p> <ol style="list-style-type: none"> <li>1. To Understand the concept of fashion industry and its sustainability</li> <li>2. To learn about the concept of sustainability in clothing industry</li> <li>3. To learn about relations of Fashion industry and Environment</li> <li>4. To Understand the idea of green consumerism</li> <li>5. To understand about Sustainable Business Strategies</li> </ol>							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>	<b>Domains of Learning Cognitive</b>					
	CO1	Fashion industry and its sustainability	K2					
	CO2	Sustainability in clothing industry	K2					
	CO3	Analysing Fashion industry and Environment	K4					
	CO4	Becoming green consumer	K3					
	CO5	Development of Sustainable Business Strategies.	K6					
<b>Units</b>	<b>Course Contents</b>							
<b>Unit I</b>	<b>Fashion sustainability</b> Introduction- Fashion, Sustainability, Pillars of sustainability. Sustainable fashion- Meaning-Importance-Need- Social, Economic and Environmental concerns related to fashion -Business models for sustainable fashion-Sustainable clothing- Sustainable consumption practices for enhanced product life. Sustainability in fashion-Benefits and challenges.							
<b>Unit-II</b>	<b>Sustainability in Clothing Industry</b> Recycling and upcycling- Concepts and benefits- Carbon footprint, water footprint and energy consumption of fashion industry. Sustainability in Clothing Industry -Clothing lifecycle, fast and slow fashion, clothes repair and re-use. Value and Green aesthetics- Ethical design- Concept of Zero waste fashion design-Product service system (PSS) for sustainable fashion- PSS design thinking and PSS consumer adoption - Multi-life Garments through Modular Structures and Supplemental Services Consumer engagement and business innovation. Sustainable fashion designers, sustainable fashion brands, Eco-							

	friendly fashion labels	
<b>Unit-III</b>	<p><b>Fashion Industry and Environment</b></p> <p>Fashion and Environment –Fashions environmental impact - Water pollution, water consumption, Micro fiber pollution, Waste and disposal, chemical usage, carbon emissions, soil degradation. Reducing environmental impact in fashion industry-buy less, buy clothes from sustainable brands, buy better quality, think before disposal, buy second hand, swap and rent clothing, cloth washing practice.</p>	
<b>Unit-IV</b>	<p><b>Green Consumerism</b></p> <p>Green consumerism -Meaning-Importance- green consumerism and waste reduction- Green consumer – Possible ways to become green consumer- Green Marketing Strategies. 3Rs – Reduce, Reuse and Recycle. Ways to increase the sustainability of fashion -Raise awareness, Radical Rethinking, Increase corporate and consumer responsibility, Push for alternatives, Introducing effective policy.</p>	
<b>Unit-V</b>	<p><b>Sustainable Business Strategies</b></p> <p>Sustainable Business Strategies - Environmentally Friendly Operation Strategies - Design for environment, environmental management systems, product stewardship programs, supply chain management, total quality management and Just-in-time. Marketing Mix for Green Products-Product, place, promotion, price. Product Life Cycle in Fashion Industry- Materials, Production, Distribution and Transportation, Product Use, End of Use. Textile recycling-Available recycle options - convenience of recycle options- Re-design solution package. Consumer behaviors and attitudes- Media and information reliability, Green clothes and information credibility.</p>	
<b>Textbook</b>	1. Fletcher K, Sustainable Fashion and Textiles- A Design Journey, Lawrence King Publishing, 2008.	
<b>Reference Book</b>	1. Yamase K, Cut up Couture- Edgy Upcycled Garments to Sew, Interweave, 2012. 2. Phillips J, Create, Sustainable Luxe- A Guide to Feel Good Fashion, Space Publishing, 2013.	
<b>E- Reference</b>	1. <a href="https://www.coursera.org/learn/sustainable-fashion">https://www.coursera.org/learn/sustainable-fashion</a> 2. <a href="https://www.edx.org/course/circular-fashion-in-a-sustainable-clothing-industry">https://www.edx.org/course/circular-fashion-in-a-sustainable-clothing-industry</a> 3. <a href="https://www.my-mooc.com/en/mooc/sustainable-fashion/">https://www.my-mooc.com/en/mooc/sustainable-fashion/</a> 4. <a href="https://www.sustainablefashionmatterz.com/what-is-sustainable-fashion">https://www.sustainablefashionmatterz.com/what-is-sustainable-fashion</a>	

Mapping of Cos with POS & PSOs	CO/ PO	PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO 7	PS O1	PS O2	PS O3	PS O4	PS O5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
Strongly Correlating (S)									-	3 Marks			
Moderately Correlating (M)									-	2 marks			
Weakly Correlating (W)									-	1 Mark			
No Correlation (N)									-	0 mark			

Subject Code	P23TCT23	SEMESTER II	YEAR-I	Credits	L	T	P	Hrs	
<b>CORE-IV</b>		<b>ECO TEXTILES AND SUSTAINABILITY</b>		<b>5</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>6</b>	
<b>Cognitive level</b>	<b>K2 – Understand; K3 - Apply; K4 - Analyze ;</b>								
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1. Understand about Eco textiles and sustainable development.</li> <li>2. Learn about the eco-friendly processing of textiles</li> <li>3. Gain knowledge about natural fibers, dyes and finishes.</li> <li>4. Learn about Ethical manufacturing</li> </ol>								
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to								
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>		
							<b>Psychomotor</b>		
	CO1	Concept of eco-friendly textile and sustainable development					K2		
	CO2	Eco-friendly processing of Textiles					K3		
	CO3	Application of natural dyes and fabric finishes					K3		
	CO4	Ethical manufacturing and environmental protection					K2		
CO5	To explore the need for recycling/upcycling of textiles					K4			
<b>Units</b>	<b>Course Contents</b>								
<b>Unit I</b>	<p><b>An overview of Eco and Sustainable Development</b>  Introduction and needs for eco-textiles, importance of eco-textiles. Ecology - Production ecology, Human ecology and Disposal ecology. Structure and stability of the ecosystem. Introduction, Definition, concepts of Sustainable Development, SDG Goals, Principles of sustainability. Green manufacturing- introduction and importance. Waste management for sustainable textiles and clothing.</p>								
<b>Unit-II</b>	<p><b>Organic and Sustainable Textiles</b>  Organic fiber production and Processes; Organic cotton, wool, silk, bamboo, Regenerated fibers- Lyocell, PLA (Polylactic Acid) fibers, Recycled fibers- PET. Nano technology applications in textile industry. Sustainable fibers– Introduction, importance and applications. Zero liquid discharge in textile industry. Reduction of carbon footprints in textile processing and finishing;</p>								

<b>Unit-III</b>	<p><b>Eco-friendly Processing of Textiles</b>  Modern approaches to eco- friendly wet processing of woven and knitted clothing. Red listed textile chemicals, effects of red listed chemicals on health and environment. Eco friendly fibers, Eco-friendly dyes and their method of dyeing; Energy efficient production methods and processing techniques. Enzymes, and natural dyes, Natural mordants for natural colour dye fixation.</p>	
<b>Unit-IV</b>	<p><b>Recycling, Up cycling of Textiles and Circular Economy</b>  Recycling- Definition, recycling process, importance of recycling. Upcycling- Definition, importance of upcycling, upcycling of textiles and clothing, sustainability through innovative designs and accessories. Circular economy- Definition, importance, benefits of circular economy.</p>	
<b>Unit-V</b>	<p><b>Ethical Manufacturing and Corporate Social Responsibility</b>  Ethical Manufacturing – Meaning, importance of ethical manufacturing in textile Industry- ethical issues relating to textile and fashion industry. Ethical practices for sourcing of sustainable fashion clothing and accessory.  Corporate Social responsibility – need and importance of CSR in fashion and apparel industry.</p>	
<b>Text Book</b>	<ol style="list-style-type: none"> <li>1. M W King, B S Gupta, R Guidoin, Bio-Textiles as Medical Implants, Woodhead Publishing, 2013.</li> <li>2. Christier.M., Environmental Aspects of Textile Dyeing, Woodhead Pub. Ltd, Cambridge, 2007.</li> </ol>	
<b>Reference Book</b>	<ol style="list-style-type: none"> <li>1. K. Sangeetha, Eco Textiles and Sustainability, Laser Park Publishing House, 2017.</li> <li>2. Richard Blackburn, Sustainable Textiles: Life Cycle and Environmental Impact, Wood head Pub.Ltd., 2009.</li> <li>3. Miraftab M. and Horrocks R., Eco Textiles, Wood head Pub. Ltd, Cambridge, 2007.</li> <li>4. Black S, Sustainable Fashion Handbook, Thames and Hudson, 2013.</li> <li>5. Rajesh D., Textiles for Sustainable Development, Anandjiwala Nova Publishers, 2007.</li> <li>6. Miraftab, M Horrocks, A. Richard, Eco textiles: The Way Forward for Sustainable Development in Textiles, Wood head Publishing, Elsevier, 2007.</li> <li>7. Richard S. Blackburn, Sustainable Textiles: Life Cycle and Environmental Impact, Woodhead Publishing; 2009.</li> <li>8. Marion I Tobler-Rohr, Hand book of Sustainable Textile Production, Woodhead Publishing, Elsevier, 2011.</li> <li>9. Charis M. Galanakis, Biobased Products and Industries, Elsevier, 2020.</li> <li>10. Shahid UI-Islam, The Impact and Prospects of Green Chemistry For Textile, Bhupendra Singh Butola, Elsevier, 2018.</li> <li>11. P. Vinayagamurthi ,S .Kavitha, D. Gopalakrishnan, Textiles finishing –Basic concepts and application, Astral Publications International Pvt. Ltd, New Delhi, 2018.</li> </ol>	

Mapping of Cos with POS & PSOs	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	M	S
Strongly Correlating (S)							-	3 Marks					
Moderately Correlating (M)							-	2 marks					
Weakly Correlating (W)							-	1 Mark					
No Correlation (N)							-	0 mark					

COURSE CODE	P23TCT24	SEMESTER II	YEAR-I	Credits	L	T	P	Hrs
<b>CORE V</b>	<b>TEXTILE TESTING</b>			<b>5</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>6</b>
<b>Cognitive level</b>	<b>K2 – Understand; K3 – Apply; K4 - Analyze;</b>							
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1. Understand the importance of textile testing and its role in quality control.</li> <li>2. Apply various testing methods and instruments for testing of textiles.</li> <li>3. Understand the national and international standards for textile testing.</li> <li>4. Analyze the properties of textile materials by testing.</li> <li>5. Evaluate the quality of textile materials based on test results.</li> </ol>							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>	
							<b>Cognitive</b>	
	<b>CO1</b>	Understand the Quality Parameters and standards of textile testing					K2	
	<b>CO2</b>	Outline the methods, procedures and instruments to determine the fibre length, fibre fineness and fibre strength					K3	
	<b>CO3</b>	Execute the Yarn testing methods for count, twist, strength and unevenness					K4	
	<b>CO4</b>	Understand the suitable testing methods for fabric weight, count, thickness, crease recovery, abrasion, stiffness, strength, drape and pilling					K2	
	<b>CO5</b>	Differentiate the procedures of various Color fastness tests					K3	
	<b>CO6</b>	Understand the comfort related properties such as air permeability, water and vapor transmission and heat transmission					K2	
<b>Units</b>	<b>Course Contents</b>							
<b>Unit I</b>	<p><b>An overview of textile testing and humidity</b>  Textile testing and its objectives: Introduction to standards – Importance, types, International Quality parameters and standards - AATCC, ASTM, BIS.  Moisture and Humidity – its importance and relationship to textiles, Standard atmospheric conditions, Measurement of humidity – Wet and Dry, Measurement of moisture regain and content by Conditioning oven and Shirley moisture meter</p>							
<b>Unit-II</b>	<p><b>Testing of fibre properties</b>  Fibre testing – Fibre length and its importance; Methods of measuring fibre length - Baer sorter; Fibre fineness –ATIRA fibre fineness tester; Fibre Maturity test; Fibre strength – Measurement of strength using Pressley tester, Fibre Quality Index; Analysis of trash and lint content in cotton by Shirley trash analyzer.</p>							

<b>Unit-III</b>	<b>III Determination of yarn properties</b> Yarn testing –Yarn count, determination of yarn count by Quadrant balance. Twist and its significance – Estimation of twist-by- twist tester; Measurement of yarn strength using CRL, CRT and CRE principles, Study of instruments – Single thread strength tester and Lea strength tester; Yarn evenness – Random and periodic variations, Yarn appearance board and ASTM standards, Uster Evenness tester.												
<b>Unit-IV</b>	<b>Determination of fabric and garment properties</b> Fabric testing – Determination of fabric weight; Count determination; Importance of cover factor – Shirley crimp tester; Measurement of thickness by Shirley thickness gauge; Fabric stiffness tester, Measurement of crease recovery – Shirley crease recovery tester; Abrasion resistance - Martindale abrasion tester; Fabric strength – Tensile, Tearing and Bursting strength testers, Pilling tester, Measurement of fabric drape, Introduction to fabric handle –Fabric Touch Tester (FTT). Garment testing - Seam testing- seam strength, seam slippage. Accessories testing- zipper, buttons, sewing thread.												
<b>Unit-V</b>	<b>Testing of fabric comfort and colour fastness</b> Clothing comfort – Introduction, Thermal comfort- water and vapour permeability, thermal conductivity, thermal resistance and air permeability. Colour Fastness– Importance and factors affecting colour fastness, Colour fastness to washing, sunlight, crocking and perspiration, grey scales and ratings.												
<b>Textbook:</b>	<ol style="list-style-type: none"> <li>1. A Practical Guide to Textile Testing, Amutha.K, CRC Press, 2016</li> <li>2. Textile Testing, Raul Jewel, APH Publishing Corporation,2005</li> </ol>												
<b>Reference Book:</b>	<ol style="list-style-type: none"> <li>1. Advanced Textile Testing Techniques, Sheraz Ahmad et al., CRC Press, 2017.</li> <li>2. Fabric Testing, Ed. Jinlian Hu, Woodhead Publishing Ltd., 2008.</li> <li>3. Principles of Textile Testing, J.E.Booth, 3rd Edition1986, CBS Publishers &amp; Distributors, 1996</li> <li>4. Textile Testing, P.Angappan and R.Gopalakrishnan, 4th revised edition, SSMITT Students Co-operative Stores, Komaraplayam.</li> <li>5. Hand Book of Textile Testing and Quality Control, E.B.Groover and D.S.Hamby, 1st U.S. Edition, 1960, Wiley Eastern Reprint 1988, Published by Mohinder Singh Sejwal (for Wiley Eastern Limited), New Delhi, India</li> <li>6. Hand Book of methods of test for cotton fibers, yarns and fabrics, V.S.Sundaram and R.L.N.Iyengar, CTRL, Mumbai, 1969</li> <li>7. Fabric testing by Jinlian Hu, first edition, Woodhead publishing, 2008</li> <li>8. Physical testing of textiles by B.P.Saville, Woodhead publishing series in textiles, Elsevier,1999</li> </ol>												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	M	S	S	S	M	S



	CO2	S	S	S	S	S	S	S	M	S	S	M	M	
	CO3	S	S	S	S	S	S	S	S	S	S	M	S	
	CO4	S	S	S	S	S	M	M	S	S	S	M	M	
	CO5	S	S	S	S	S	S	S	S	S	S	M	S	
	Strongly Correlating (S)							-	3 Marks					
	Moderately Correlating (M)							-	2 marks					
	Weakly Correlating (W)							-	1 Mark					
	No Correlation (N)							-	0 mark					

COURSE CODE	P23TCP22	SEMESTER II	YEAR-I	Credits	L	T	P	Hrs
<b>CORE VI PRACTICAL-II</b>		<b>TEXTILE AND APPAREL TESTING PRACTICAL</b>		<b>4</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>6</b>
<b>Cognitive level</b>	<b>K4 - Analyze; K5 - Evaluate;</b>							
<b>Learning Objectives</b>	The main objectives of this course are to 1. Test the quality parameters of the fabric, 2. Evaluate the quality of yarn and garments 3. Analyze the colour fastness properties of fabric							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>	
							<b>Cognitive</b>	
	<b>CO1</b>	Perform yarn tests for crimp percentage, evenness and single yarn strength					K5	
	<b>CO2</b>	Analyze fabric test such as weight, count, thickness, crease recovery, abrasion, stiffness, bursting strength, tearing strength, drape and pilling					K4	
<b>CO3</b>	Assess various color fastness tests					K5		
	<b>Course Contents</b>							
<b>I</b>	Observe the latest textile testing instruments in textile and garment industries.							
<b>II</b>	Experiment, test and evaluate different types of fibres, yarns and fabrics.							
<b>III</b>	Prepare report of your observations.							
	1. Yarn Count, lea strength 2. Single Yarn Strength Twist of yarn Fabric parameters- EPI, PPI, Thickness, GSM Stiffness of fabric Abrasion Resistance of fabric Crease Recovery of fabric Drape of fabric Pilling of fabric 10. Tensile Strength of fabric 11. Tear Strength of fabric . Bursting Strength of fabric . Colour Fastness to Washing							

	. Crocking of crocking (dry/wet) . Colour Fastness to Perspiration of fabric . Shrinkage 16. Seam testing: seam strength, seam slippage. 17. Accessories Testing: Zipper, Buttons, Sewing thread.													
<b>Textbook</b>	1. A Practical Guide to Textile Testing, Amutha.K, CRC Press, 2016													
<b>Reference Book</b>	1. Textile Testing, Raul Jewel, APH Publishing Corporation,2005 2. Advanced Textile Testing Techniques, Sheraz Ahmad et al., CRC Press, 2017. 3. Fabric Testing, Ed. Jinlian Hu, Woodhead Publishing Ltd., 2008. 4. Principles of Textile Testing: An Introduction to Physical Methods of Testing Textile Fibers, Yarns and Fabrics, J.E.Books, Butterworths,1986													
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO 2	PO3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	
	CO1	S	S	S	S	S	S	S	S	S	S	M	S	
	CO2	S	S	S	S	S	S	S	S	S	S	M	S	
	CO3	S	S	S	S	S	S	S	S	S	S	M	S	
	CO4	S	S	S	S	S	S	S	S	S	S	M	S	
	CO5	S	S	S	S	S	S	S	S	S	S	M	S	
	Strongly Correlating (S) - 3 Marks Moderately Correlating (M) - 2 marks Weakly Correlating (W) - 1 Mark No Correlation (N) - 0 mark													

Subject code	P23TCE2A	SEMESTER II	YEAR-I	Credits	T	L	P	Hrs																			
<b>ELECTIVE III</b> Discipline Centric		<b>FABRIC DRAPING AND CONSTRUCTION PRACTICAL</b>		<b>3</b>	-	-	<b>4</b>	<b>4</b>																			
<b>Cognitive level</b>	<b>K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b>																										
<b>Learning Objectives</b>	<p>The main objectives of this course are to</p> <ol style="list-style-type: none"> <li>1. To study about the theme formulation and garment designing ideas</li> <li>2. To design garments and develop patterns using draping techniques</li> <li>3. To develop the knowledge of selecting suitable fabrics</li> <li>4. To apply construction skill for garment development and enrichment</li> <li>5. To learn the cost calculation for finished garment</li> </ol>																										
<b>Course Learning Out comes</b>	<p>On</p> <table border="1"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Outcomes</th> <th>Domains of Learning</th> </tr> <tr> <th>Cognitive</th> </tr> </thead> <tbody> <tr> <td>CO1</td> <td>Developing theme and garment design</td> <td>K6</td> </tr> <tr> <td>CO2</td> <td>Application of draping techniques for pattern making</td> <td>K3</td> </tr> <tr> <td>CO3</td> <td>Analyzation and collection of suitable materials for garment design</td> <td>K4</td> </tr> <tr> <td>CO4</td> <td>Application of Garment construction and enrichment techniques</td> <td>K3</td> </tr> <tr> <td>CO5</td> <td>Evaluation of cost of finished garment</td> <td>K5</td> </tr> </tbody> </table> <p>successful completion of the course, the students will be able to</p>								S. No	Outcomes	Domains of Learning	Cognitive	CO1	Developing theme and garment design	K6	CO2	Application of draping techniques for pattern making	K3	CO3	Analyzation and collection of suitable materials for garment design	K4	CO4	Application of Garment construction and enrichment techniques	K3	CO5	Evaluation of cost of finished garment	K5
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CO5	Evaluation of cost of finished garment	K5																									
	<b>Course Contents</b>																										
<b>I</b>	<p>Development of garments by incorporating draping techniques.</p> <ul style="list-style-type: none"> <li>• Develop a theme, design garment sketch and present flat sketches for Children/ Women's / Men's/special garments (any three)</li> <li>• Take measurements and select suitable fabric for draping the developed garment design (muslin weight is closer to the choice of fabric)</li> <li>• Drape the fabric on dress form and make loose stitches for floating effect or develop sloper pattern</li> <li>• Include sewing allowance to the pattern and make necessary pattern alternations</li> <li>• Construction of garments</li> <li>• Finish the garments with accessories / embellishments.</li> <li>• Calculate the cost of the garment.</li> </ul>																										

<b>Text Books</b>	1. Zarapkar System of cutting, Zarapkar Tailoring College, Navneet, 2010.												
<b>References</b>	1. Reader's Digest Complete Guide to Sewing, Reader's Digest Association, 1982. 2. Anita Tyagi, Handbook of fashion Technology, Sonali Publications, New Delhi, 2012. 3. Peg Couch, Garment Construction: A Complete course on making clothing for fit and Fashion, Fox Chapel Publishing. USA, 2011. 4. Marie Clayton, make your own clothes: Twenty custom fit pattern to sew, Collins & Brown, London, 2008. 5. Draping for Fashion Design, Jaffe, Jaffe Hilde, Pearson Education India, 2009 6. Draping: The Complete Course, Karolyn Kiisel, Laurence King Publishing, 2013 7. Draping for Apparel Design, Helen Joseph-Armstrong, Bloomsbury Academic, 2013 8. Cutting and Draping Party and Eveningwear: Dressmaking and pattern cutting for special occasion clothes Dawn Cloake Pavilion Books, 01-Oct-2016 9. The Art of Fashion draping-Connie Amaden -Crawford. 10. Comdex fashion design- Dr.Navneet Kaur. 11. Fashion Draping- Helen Joseph Armstrong. 12. Basics of fashion design, Knitwear design by Alexander McQueen, A/W09. 13. Fashion Design: The Complete Guide, by JOHN HOPKIN.												
<b>E-References</b>	1. <a href="https://iifd.in/importance-draping-fashion-designing/">https://iifd.in/importance-draping-fashion-designing/</a> 2. <a href="https://www.fibre2fashion.com/industry-article/7463/art-of-fashion-draping,by-fashion2fibre">https://www.fibre2fashion.com/industry-article/7463/art-of-fashion-draping,by-fashion2fibre</a> .												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
	CO1	S	S	S	S	S	S	S	S	S	S	S	S
	CO2	S	S	S	S	S	S	S	S	S	S	S	S
	CO3	S	S	S	S	S	S	S	S	S	S	S	S
	CO4	S	S	S	S	S	S	S	S	S	S	S	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
	Strongly Correlating (S)								-				3 Marks
	Moderately Correlating (M)								-				2 marks
	Weakly Correlating (W)								-				1 Mark
	No Correlation (N)								-				0 mark

<b>Course code</b>	<b>P23TCE2B</b>	<b>SEMESTER II</b>	<b>YEAR-I</b>	<b>Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Hrs</b>
<b>ELECTIVE III</b> Discipline Centric		<b>FASHION RETAILING</b>		<b>3</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>Cognitive level</b>	<b>K2 – Understand; K3 - Apply; K4 - Analyze; K6 – Create</b>							
<b>Learning Objectives</b>	<p>The main objectives of this course are:</p> <ol style="list-style-type: none"> <li>1. To learn about retail merchandising</li> <li>2. To Understand about retail locations</li> <li>3. To impart students the knowledge of about brands and private labels</li> <li>4. To analyze the financial aspects of Merchandising</li> <li>5. To plan Store Layout and Merchandise Presentation</li> </ol>							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning Cognitive</b>	
	CO1	Understand the concepts of retail merchandising					K2	
	CO2	Apply the concept in planning the retail locations					K3	
	CO3	Analyze brands and private labels					K4	
	CO4	Analyze the online retail business					K4	
	CO5	Development of store layout and merchandise presentation					K6	
<b>Units</b>	<b>Course Contents</b>							
<b>Unit I</b>	<b>Retail Merchandising</b> Retail Merchandising -The Marketing Channel, Retail organization structures, retail merchandising , Retailing Formats- Department stores specialty stores, hard – to – classify stores, Depth and breadth, discounting , Other Retailing Formats – non store retailers.							
<b>Unit-II</b>	<b>Retail Locations</b> Retail Locations -Unplanned shopping districts, planned shopping centres, and the mix of stores in a shopping center. Retail growth and expansion – Retail ownership. International Retailing, Retailing Advertising.							

<b>Unit-III</b>	<b>Brands and private labels</b> Brands and private labels- -branded Merchandising, Licensing, Private Labels, Private labels as Brands. Merchandise Recourses – Manufacturers, Merchant Wholesaler – Distributors. Trade Shows.												
<b>Unit-IV</b>	<b>Online Retail Business</b> Online retail business - Introduction and Emergence of Internet retailing - Components of E-Retailing– Advantages – Shortcomings - Opportunities for Online retail in India –Challenges in E-Retailing. Augmented Reality (AR) For Fashion Ecommerce – Introduction to Augmented Reality, Benefits of AR in fashion ecommerce – Benefits of AR Virtual fitting rooms.												
<b>Unit-V</b>	<b>Store Layout and Merchandise Presentation</b> Store Planning and Store design - elements- Store layout, signage and graphics- – types of store layout - grid, loop, free form, and spine. Creating an appealing store atmosphere -Visual Merchandising – Fixtures -Merchandise Presentation techniques.												
<b>Textbook:</b>	1. John Donnellan, Merchandise Buying and Management, Fairchild Publications, New York 1996.												
<b>Reference Book:</b>	1. Ellen Diamond, Fashion Retailing: A Multi-Channel Approach, Prentice Hall, 2nd Edition, 2005.												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	S	M	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	S	S
	CO4	S	S	S	S	S	S	S	M	S	S	S	S
	CO5	S	S	S	S	S	S	S	M	S	S	M	S
	Strongly Correlating (S)									-	3 Marks		
Moderately Correlating (M)									-	2 marks			
Weakly Correlating (W)									-	1 Mark			
No Correlation (N)									-	0 Mark			

<b>Course code</b>	<b>P23TCE2C</b>	<b>SEMESTER II</b>	<b>YEAR-I</b>	<b>Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Hrs</b>
<b>ELECTIVE-III</b> Discipline Centric		<b>COMMUNICATION FOR FASHION BUSINESS</b>		<b>3</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>Cognitive level</b>	<b>K2 – Understand; K3 - Apply; K4: Analyze, K6 - Create</b>							
<b>Learning Objectives</b>	The main objectives of this course are: 1. To study about communication process 2. To understand about the importance of listening 3. To learn about the business correspondence and presentation skills 4. To study the business communication techniques							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>	<b>Domains of Learning Cognitive</b>					
	CO1	Business communication and its process	K2					
	CO2	Significance of active and poor listening	K2					
	CO3	Application of Presentation skills	K3					
	CO4	Analyze the principles of Business correspondence	K4					
	CO5	Application of business communication skills for letter correspondence	K3					
<b>Units</b>	<b>Course Contents</b>							
<b>Unit I</b>	<b>Communication</b> Communication- meaning, Importance and purpose, role of communication in business, main forms of communication business. Types of Communication-Forms of Communication.-Verbal and non- verbal communications - Technology and Business Communication, Communication in Management, effective communication at workplace – Barriers. Corporate communication							
<b>Unit-II</b>	<b>Listening</b> Listening-Definition-Listening Process-Types-Superficial, Appreciative, Focused, Attentive Evaluative, Empathetic-Barriers- Traits of a good Listener, factors contributing to poor listening, Active listening. Technical Writing-Importance, Characteristics. Report writing- objectives and types. Business proposals-definition, types. Note making and writing technique.							



<b>Unit-III</b>	<b>Meetings, Presentation skills</b> Meetings – Types, Characteristics, Conducting Meetings, Effective meeting, communicating through Visuals. Presentation skills- Definition, Importance, features of a good presentation, components of presentation skills-Planning effective presentation- -Analyze the audience, Structure, verbal delivery, Body language and movement, form of language, equipment's and facilities, verbal and nonverbal, Interacting with audience and managing questions, Rehearsal - Network Etiquette												
<b>Unit-IV</b>	<b>Business Correspondence</b> Business Correspondence -Meaning and significance-Principles-Essentials of Business letters- -introduction, format and layout -E-mail- report writing,-writing skills - Elements of business letter- Formats - Types of business letter-Internal, External, Routine, Sales, Personalized, Circulars.												
<b>Unit-V</b>	<b>Letter Correspondence</b> Letter Correspondence- Introduction, Objectives- - Requirement correspondence- definition, application letter, contact of resume and CV, interview letter, offer of employment, letter of acceptance, resignation letter, letter of recommendation.												
<b>Textbook:</b>	1. R.C. Bhatia, Business communication, Ane's books Pvt. Ltd., New Delhi, 2009.												
<b>Reference Book:</b>	1. Krishna Mohan and Meera Banerji, Developing communication skill, Trinity press, Lakshmi publication, Chennai, 2016. 2. Mary Ellen guffey, Essentials of communication, south – western collage publication Association for business communication, 2018. 3. Pooja Khanna, Business Communications, Vikas Publishing House Pvt.Ltd., Noida,2015.												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	M	M	S	S	S	S
	CO2	M	S	S	S	S	S	M	S	M	S	S	S
	CO3	S	S	S	S	S	S	S	S	S	S	S	S
	CO4	S	S	S	S	S	S	S	S	S	S	S	S
	CO5	S	S	S	S	S	S	M	S	S	S	S	S
	<p>Strongly Correlating (S) - 3 Marks</p> <p>Moderately Correlating (M) - 2 marks</p> <p>Weakly Correlating (W) - 1 Mark</p> <p>No Correlation (N) - 0 mark</p>												

<b>Course code</b>	<b>P23TCS1A</b>	<b>SEMESTER II</b>	<b>YEAR-I</b>	<b>Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Hrs</b>																			
<b>NME Skill Enhancement Course (SEC-1)</b>	<b>SURFACE ORNAMENTATION PRACTICAL</b>			<b>2</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>																			
<b>Cognitive level</b>	<b>K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b>																										
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>To acquaint students with the knowledge on application of embellishments on fabric surface.</li> <li>To enrich garments using dyeing</li> <li>To impart the knowledge and skills required to design fabrics and garments using printing and painting</li> <li>To design garments through proper selection of embroidery stitches</li> <li>To identify the usage of garment accessory for enrichment of garments.</li> </ol>																										
<b>Course Learning Outcomes</b>	<p>On successful completion of the course, the students will be able to</p> <table border="1"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Outcomes</th> <th>Domains of Learning</th> </tr> <tr> <th>Cognitive</th> </tr> </thead> <tbody> <tr> <td>CO1</td> <td>Designing garments with surface decoration</td> <td>K5</td> </tr> <tr> <td>CO2</td> <td>Application of dyeing techniques on garments</td> <td>K3</td> </tr> <tr> <td>CO3</td> <td>Garment designing using printing and painting</td> <td>K6</td> </tr> <tr> <td>CO4</td> <td>Evaluate samples produced using embroidery</td> <td>K4</td> </tr> <tr> <td>CO5</td> <td>Create designs using garment accessories</td> <td>K6</td> </tr> </tbody> </table>								S. No	Outcomes	Domains of Learning	Cognitive	CO1	Designing garments with surface decoration	K5	CO2	Application of dyeing techniques on garments	K3	CO3	Garment designing using printing and painting	K6	CO4	Evaluate samples produced using embroidery	K4	CO5	Create designs using garment accessories	K6
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CO5	Create designs using garment accessories	K6																									
<b>Course Contents</b>																											
<b>I</b>	<p>Develop designs on garments for surface enrichment of neckline/waist line/sleeves/bottom hem line/collars/plackets/around buttons or button hole/arm line/pockets using the below embellishment techniques.</p> <ol style="list-style-type: none"> <li>Dyeing - Tie and dye/ Batik</li> <li>Printing – Block/Screen/Stencil</li> <li>Painting</li> </ol>																										

	4. Embroidery -Hand/Machine 5. Smocking 6. Lace 7. Applique 8. Studs/Beads/sequins/mirror/stone 9. Accessories-Buttons/elastic/cords/tapes/buckles												
<b>Text Books</b>	1. Munni Srivatsava and Bats for, Embroidery Techniques from East & West, London, 2005.												
<b>Reference Books</b>	1. Lucinda Ganderton, Dorothy Wood, The Ultimate Book of Quilting Cross Stitch, Needle craft Annes Publishing Ltd., London, 2005. 2. Nancy Ziemon, Machine Embroidery with confidence – A beginner’s guide, Krause Publications West Indies, 2005. 3. Margo Singer, Textile Surface Decoration- Silk and Velvet, Textile handbook, A&C Black Publishers, Great Britain, 2007.												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
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	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
	Strongly Correlating (S)	-							3 Marks				
Moderately Correlating (M)	-							2 marks					
Weakly Correlating (W)	-							1 Mark					
No Correlation (N)	-							0 mark					

<b>Course code</b>	<b>P23TCS1B</b>	<b>SEMESTER II</b>	<b>YEAR-I</b>	<b>Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Hrs</b>
<b>NME-Skill Enhancement Course (SEC-1)</b>	<b>ORNAMENTS AND ACCESSORY DESIGNING PRACTICAL</b>			<b>2</b>	<b>-</b>	<b>-</b>	<b>--4</b>	<b>4</b>
<b>Cognitive level</b>	<b>K3 - Apply; K5 - Evaluate; K6 – Create</b>							
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1. To create and develop ornaments and jewellery.</li> <li>2. To design ornaments and jewellery for various occasion.</li> </ol>							
<b>Course Learning Outcomes</b>	On successful completion of the course, the students will be able to							
	<b>S. No</b>	<b>Outcomes</b>					<b>Domains of Learning</b>	
							<b>Cognitive</b>	
	1	Designing garments with Fabric accessories					K6	
	2	Application of various ornaments suitable various occasions and garment styles					K3	
	3	Ornament designing suitable to different human personalities					K6	
	4	Evaluate over all appearance on applying ornaments and accessories					K5	
	<b>Course Contents</b>							
<b>I</b>	<b>Create the following (Any three)</b>							
	<ol style="list-style-type: none"> <li>1. Fabric accessories - Bag/Stole/Hat/shawl/scarf /mask/gloves/any others</li> <li>2. Leather accessories - Belt/Shoe/Slipper/suspenders/pouch /any others</li> <li>3. Clay and Stone accessories - One set of ornament</li> <li>4. Metal accessories - Ear ring/ Necklace/ Ring/Bangle/Anklet/Bracelet /any others</li> <li>5. Use of natural waste materials and other usable materials for making fashion accessory.</li> </ol>							
<b>II</b>	<b>Create the following ornaments (Any five)</b>							
	<ol style="list-style-type: none"> <li>1. Ornaments for Hair</li> <li>2. Ornaments for Ear</li> <li>3. Ornaments for Neck</li> <li>4. Ornaments for Hand</li> </ol>							

	5. Ornaments for Hip 6. Ornaments for Finger 7. Ornaments for legs												
<b>III</b>	<b>Create set of ornaments to suit a dress (Any one)</b>  1. Set of Bridal ornaments 2. Set of ornaments for any special garments (like fashion show, dance costume etc)												
<b>Textbook:</b>	1. Jewellery Making, A Complete Course for Beginners, Jinks McGrath, Apple Press, 2007												
<b>Reference Book:</b>	1. The Workbench Guide to Jewellery Techniques, Anastasia Young, Thames and Hudson, 2010 2. Phyllis G. Tortora, Bina Abling,(2003) The Fairchild Encyclopedia of Fashion Accessories, Fair child Publications 3. 2. Elizabeth Galton, (2012) Jewelry Design: From Fashion to Fine Jewelry, AVA Publishing, Singapore. 4. 3. Robert Leach, (2012), The Fashion Resource Book: Research for Design, Thames & Hudson. 5. 1. Gini Stephen Frings, (2002) Fashion from Concept to Consumer, Prentice Hall Inc., New Jersey. 6. 2. Marywolfe (2003), The world of fashion merchandising, The Goodheart-wilcox Company Inc. Illinois 7. 3. Dorling Kindersley,(2012) Fashion, The Ultimate Book of Costume and Style, Published by Dorling Kindersley Limited; London.												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
	CO5	S	S	S	S	S	S	S	S	S	S	S	S
	Strongly Correlating (S) - 3 Marks Moderately Correlating (M) - 2 marks Weakly Correlating (W) - 1 Mark No Correlation (N) - 0 mark												

<b>Course code</b>	<b>P23TCS1C</b>	<b>SEMESTER II</b>	<b>YEAR-I</b>	<b>Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Hrs</b>															
<b>NME- Skill Enhancement Course (SEC-1)</b>	<b>HAND EMBROIDERY</b>			<b>2</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>															
<b>Cognitive level</b>	<b>K2- Understand; K3 - Apply; K6 - Create</b>																						
<b>Learning Objectives</b>	<p>The main objectives of this course are to:</p> <ol style="list-style-type: none"> <li>1.To study about the Fundamentals of Embroidery</li> <li>2.To understand the origin of Indian Embroidery</li> <li>3.To learn about hand and machine embroidery stitch types</li> <li>4.To understand traditional Indian embroideries</li> </ol>																						
<b>Course Learning Outcomes</b>	<p>On successful completion of the course, the students will be able to</p> <table border="1"> <thead> <tr> <th><b>S. No</b></th> <th><b>Outcomes</b></th> <th><b>Domains of Learning Cognitive</b></th> </tr> </thead> <tbody> <tr> <td>CO1</td> <td>Learn about basic hand and machine embroidery stitches</td> <td>K2</td> </tr> <tr> <td>CO2</td> <td>Understand about different Indian embroideries and its historic importance</td> <td>K2</td> </tr> <tr> <td>CO3</td> <td>Take care and maintain embroidered materials</td> <td>K3</td> </tr> <tr> <td>CO4</td> <td>Creation of design for applying embroidery stitches on fabrics</td> <td>K6</td> </tr> </tbody> </table>								<b>S. No</b>	<b>Outcomes</b>	<b>Domains of Learning Cognitive</b>	CO1	Learn about basic hand and machine embroidery stitches	K2	CO2	Understand about different Indian embroideries and its historic importance	K2	CO3	Take care and maintain embroidered materials	K3	CO4	Creation of design for applying embroidery stitches on fabrics	K6
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<b>Units</b>	<b>Course Contents</b>																						
<b>Unit I</b>	<p><b>Fundamentals of Embroidery</b>  Fundamentals of Embroidery, Selection of material – thread – needle. Methods of tracing design, Hand embroidery Stitches – Running, stem, Blanket , Lazy daisy, chain, couching, Herringbone, Fish bone, Feather – single and double, Rumanian seeds, Cross, Fly, Stain, Long and Short, French knot, Bullion knot, Double knot, Lettering – Alphabets and Monogram work.</p>																						
<b>Unit-II</b>	<p><b>Machine Embroidery stitches</b>  Machine Embroidery stitches – Running, cording, Satin, Long and Short, Granite, Eyelet, Cutwork, Letters Monograms, appliqué on net.</p> <p>Technical Writing-Importance, Characteristics. Report writing- objectives and types.  Business proposals-definition, types. Note making and writing technique.</p>																						

<b>Unit-III</b>	<b>Special stitches</b> Special stitches - Counted thread work on canvas material – Drawn Thread Work – Cut Work – Bead Work – Mirror Work – Sequins Work. Designing and producing fabric appliques and placing it on children and women’s apparel												
<b>Unit-IV</b>	<b>Origin of Indian Embroidery</b> Origin of Indian Embroidery. Embroidery stitches used – Kashida of Kashmir, kantha of Bengal, Phulkari of Punjab, Kasuti of Karnataka, Chikankari of Luck now Embroidery of Kutch and Kathiawar, Zari embroidery – Types, Colours, Motiffs, Fabric used and their historical importance												
<b>Unit-V</b>	<b>Care and Maintenance of Embroidery</b> Care and Maintenance of Embroidery Articles – Pressing Articles – Frames - Glass & Wooden. Estimating, Costing & Marketing of Finished Embroidery Goods.												
<b>Textbook:</b>	1. Mary Mathews, Practical clothing construction -Part I, II , 1986, Cosmic Press, Chennai												
<b>Reference Book:</b>	<ol style="list-style-type: none"> <li>1. JamilaBrijBhushan, The costumes and textiles and India, 1958, D B Taraporevala Sons &amp; Co, Bombay.</li> <li>2. DorrisFlyn, Costumes of India, 1971, xford&amp;IBH Publishing Co ,Delhi</li> <li>3. Das S.N , Costumes of India and Pakistan, 1956, DB Taraporevala Sons and co, Bombay</li> <li>4. Encyclopedia of Embroidery Stitches Including Crewel, 1974, Dover Publications</li> <li>5. Val Holmes, Decorative Painting Techniques Book, 2003.</li> </ol>												
<b>Mapping of Cos with POS &amp; PSOs</b>	CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	S	S	S	S	S	S	S	S	S	S	M	S
	CO2	S	S	S	S	S	S	S	S	S	S	M	S
	CO3	S	S	S	S	S	S	S	S	S	S	M	S
	CO4	S	S	S	S	S	S	S	S	S	S	M	S
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