



# PERIYAR UNIVERSITY

PERIYAR PALKALAI NAGAR

SALEM-636011

## DEGREE OF BACHELOR OF SCIENCE CHOICE BASED CREDIT SYSTEM



*Syllabus for*

**B.Sc. TEXTILE AND FASHION DESIGNING**

(SEMESTER PATTERN)

(For Candidates admitted in the College Affiliated to Periyar  
University From 2021-2022 onwards)

**REGULATIONS**

## **I. ELIGIBILITY**

Candidate seeking admission to the first year Degree of Bachelor of Science in Textile and Fashion Designing shall be required to have passed in any Higher Secondary course examination (Regular academic or Vocational) of the State Board/CBSE/ICSE or other examination accepted as equivalent thereto by the Syndicate, subject to such other conditions as may be prescribed. Pass in any three year Diploma in Fashion/Costume/Textile/Apparel related course is eligible to admit in direct second year of this UG course.

## **II. DURATION**

The course for the degree of Bachelor of Science Textile & Fashion Designing shall extend over a period of three academic years - 6 Semesters and each semester normally consisting of 90 working days or 450 Hours.

## **III. ELIGIBILITY FOR THE DEGREE**

A candidate shall be eligible for the degree of Bachelor of Science Textile & Fashion Designing, if he/she has satisfactorily undergone the prescribed courses of the study for a period not less than 6 semesters in an institution approved by the university has passed the prescribed examinations in all the 6 Semesters.

## **IV. SUBJECT OF STUDY**

The subjects of the study for the B.Sc., Textile & Fashion Designing and the syllabus for the subjects are given in the annexure.

## **V. REQUIREMENT OF EXAMINATION**

The theory examinations will be conducted for 3 hours by the university in the subjects prescribed for all the semesters in every semester.

The practical examinations will be conducted by the university for 3 hours with respective to allied and core practical in all the subjects prescribed in every semester.

## **VI. SCHEME OF THE EXAMINATION**

The scheme of examinations for the course is given in Annexure. All the practical examinations /Internship work shall be conducted & evaluated internally by the institution themselves with internal and external examiners appointed by the university.

## **VII. PASSING RULES**

### **Theory**

- 75% of the marks for external evaluation and 25% marks are allotted for internal evaluation.
- Candidate is demand to have passed to a subject, if he/she get a minimum of 40% of total marks in theory subjects with internal mark of 10 marks and external marks of 30 marks.

### **Practical**

---

- 60% of the marks for external evaluation and 40% marks are allotted for internal evaluation.
- For practical subjects, the candidate should get minimum marks of 24 marks in external evaluation out of 60 and 16 marks in internal evaluation out of 40.
- For project viva voce, 80 % of the marks for internal evaluation and 20% marks are allotted for external evaluation.
- For project, the candidate should get minimum marks of 32 marks in internal evaluation out of 80 and 8 marks in external evaluation out of 20.



## PROGRAMME OUTCOMES

---

1. The graduates will be able to utilize their knowledge and skills in higher studies and research.
2. The graduates will able to execute innovative and professional skills in the field of Apparel Industry.
3. The graduates can start-up their business, freelance and enterprise without difficulty and can also enter into the world of work easily.
4. The graduates can exit with employability in various fields of textiles and apparel.

**Program Educational Outcomes (PEOs)**

The **B.Sc. ( Textile & Fashion Designing)** program describe accomplishments that graduates are expected to attain within five to seven years after Graduation

PEO1	The student can excel in the field of <b>Textile &amp; Fashion Designing</b> after the completion of the Program.
PEO2	The student can develop his own brands in Apparel Sector.
PEO3	Start- Up of An Entrepreneur with potential is possible with new ideas towards Apparel Industry.
PEO4	The student can choose to work as a freelance designer.
PEO5	The student can begin his career in the area of Apparel Production.
PEO6	The student can work as Quality Mangers in Garment Industry
PEO7	The student can work as Fabric Mangers in woven & Knitted Fabric sector.
PEO8	The student can also work as an industrial engineer.
PEO9	The student can work as Merchandiser and Costing Mangers in Garment Industries.
PEO10	The student can act as Consultant in Apparel Sectors.



SEM	PART	PAPER CODE	COURSE CODE	COURSE	HRS		Credit	MARKS		
					L	T/P		CIA	EA	TOTAL
I	I		Language	Tamil-I	2	4	3	25	75	100
	II		Language	English-I	2	4	3	25	75	100
	III		Core-I	Fiber & Yarn Science	5		5	25	75	100
			Core Practical-I	Fiber & Yarn Science - Practical	-	3	2	40	60	100
			Allied-I	Pattern Making & Grading	4		4	25	75	100
	IV		Value Education	Yoga	2		2	25	75	100
			Add-on Course	Professional English	4	-	4	25	75	100
						30	23			700
II	I		Language	Tamil-II	2	4	3	25	75	100
	II		Language	English-II	2	4	3	25	75	100
			NaanMudhal van Skill Course	Language Proficiency for Employability-Effective English	2	-	2	25	75	100
	III		Allied-II	Apparel Manufacturing Machineries & Equipment	5		5	25	75	100
			Core Practical-II	Basic Apparel Designing- Practical	-	4	2	40	60	100
			Allied Practical-I	Basic Illustration & Sketching – Practical	-	3	2	40	60	100
	IV		EVS	Environmental Studies	2	-	2	25	75	100
			Add-on Course	Professional English	4	-	4	25	75	100
						30	21			700
III	III		Core-II	Woven Fabric Science	5	-	5	25	75	100
			Core Practical-III	Woven Fabric Science Practical	-	3	2	40	60	100
			Core-III	Knitting & Non-Woven	5	-	5	25	75	100
			Core Practical-V	Children's Apparel Practical	-	5	3	40	60	100
			Allied-III	Fashion Designing	4		4	25	75	100
			Allied Practical-III	Fashion Designing Practical	-	4	2	40	60	100
	IV		NMEC-I	Fundamentals of Textiles	2		2	25	75	100
	IV		NMSDC	Digital Skills for Employability – Microsoft Office Essentials	2		2	25	75	100
						30	25			800

SEM	PART	PAPER CODE	COURSE CODE	COURSE	HRS		Credit	MARKS		
					L	T/P			CIA	EA
IV	III		Core -V	Textile Testing & Quality Control	3	-	3	25	75	100
			Core -VI	Textile Wet Processing	3	-	3	25	75	100
			Core Practical-VI	Women's Apparel Practical	-	6	3	40	60	100
			Core Practical-VII	Textile Wet Processing Practical	-	6	3	40	60	100
		SBEC	Naan Mudhalvan – Skill Course	Digital Skills for Employability	2	-	2	25	75	100
			Allied-IV	Home Textiles	3	-	3	25	75	100
	IV		SBEC-I	Embroidery & Accessories Making Practical		5	3	40	60	100
			NMEC-II	Fundamentals Of Designing	2	-	2	25	75	100
							30	22		
V	15 Days Internship to any Textile Processing / Garment Industry (viva voce for the internship training in V semester)									
	III		Core VII	Apparel Costing & Merchandising	5		5	25	75	100
			Core VIII	Textile Finishing	5		5	25	75	100
			Core IX	Fashion Business Communication	5		5	25	75	100
			Core Practical-VIII	Computer Application in Garment Designing Practical	-	4	2	40	60	100
			Internship	Internship project Viva-Voce	-	-	-	-	-	-
			Core Practical-IX	Men's Apparel Practical	-	4	2	40	60	100
			MBEC-I	Entrepreneurship Development	5		5	25	75	100
	IV		NMSDC	Marketing and Design Tools	2		2	25	75	100
					30	26			600	
VI	III		Core-X	Clothing Care	4	-	4	25	75	100
			Core XI	Apparel Production Management	5	-	5	25	75	100
			Core Practical-X	Fashion Draping Practical	4		2	40	60	100
			Naan Mudhalvan – Skill Course	Innovative & Creative Skills for Employability- Content writing & Digital Marketing	2	-	2	-	-	-
			MBEC-II	International Trade And Documentation	3	2	4	25	75	100
	IV		SBEC II	Portfolio Presentation-Viva Voce	-	5	3	40	60	100
			SBEC-III	Beauty Care Practical	-	5	3	40	60	100
				Extension Activity	-	-	1	-	-	-
						30	24			600

## QUESTION PAPER PATTERN

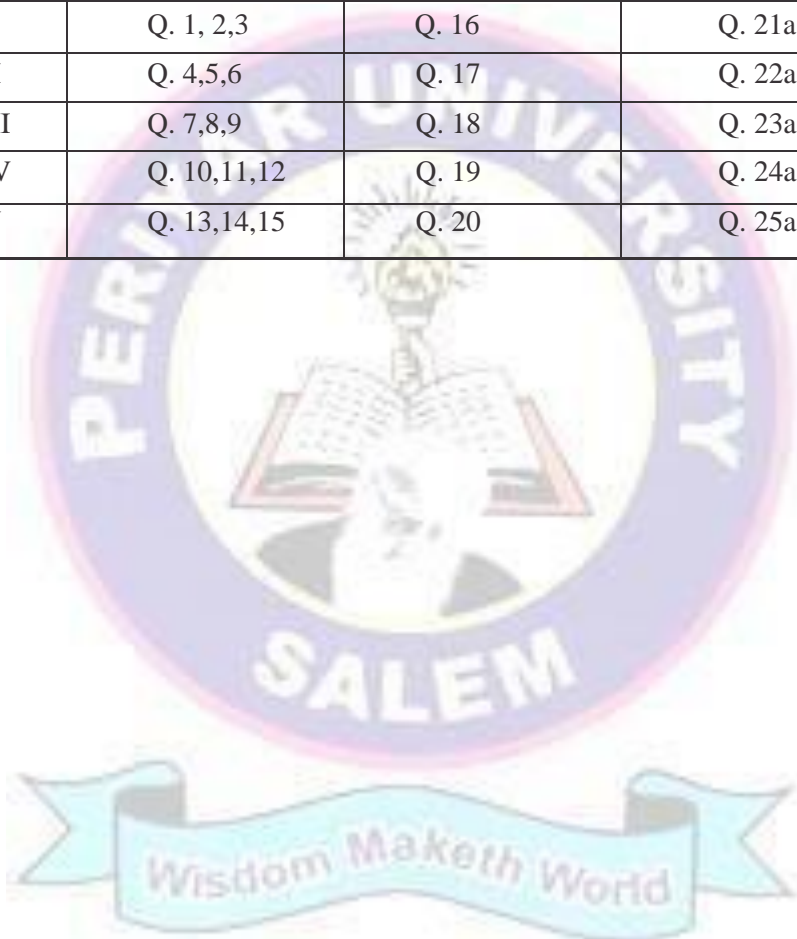
### THEORY

Time: 3 Hours

Total Marks : 75 Marks

## QUESTION PAPER PATTERN

Unit	Section-A	Section-B	Section-C
I	Q. 1, 2,3	Q. 16	Q. 21a, 21b
II	Q. 4,5,6	Q. 17	Q. 22a, 22b
III	Q. 7,8,9	Q. 18	Q. 23a, 23b
IV	Q. 10,11,12	Q. 19	Q. 24a, 24b
V	Q. 13,14,15	Q. 20	Q. 25a, 25b



**SECTION A (15 X1 = 15)**  
**ANSWER ALL THE QUESTIONS**  
**SECTION B (5 X2 = 10)**  
**ANSWER ANY TWO QUESTIONS**  
**SECTION C (5X10 = 50)**  
**EITHER OR CHOICE ANSWER ALL THE QUESTIONS**

INTERNALASSESSMENT	MARKS
TEST :	15
ASSIGNMENT :	5
ATTENDANCE:	5
	<hr/>
	<b>25</b>

PASSING MINIMUM(IA)40% - 10 MARKS

PASSING MINIMUM(UE)40% - 30 MARKS

PASSING MINIMUM TOTAL - 40MARKS

**PRACTICAL :**

**Time: 3 HoursTotal Marks : 60Marks**

**SECTION A (1X20= 20)**      Either or Choice      ANSWER ANYONE

**SECTION B (1 X40= 40)**      Either or Choice      ANSWER ANYONE

**INTERNALMARKS:**

RECORD: 25

SAMPLE: 10

ATTENDANCE: 05

**TOTAL : 40 MARKS**

PASSING MINIMUM(IA) 40% - 16 MARKS

PASSING MINIMUM(UE) 60% - 24 MARKS

PASSINGMINIMUMTOTAL - 40MARKS





# FIRST SEMESTER



Wisdom Maketh World

Course Code		FIBER & YARN SCIENCE	L	T	P	C
Core-I			5	-	-	5
Basic Knowledge in Textiles and Science			Syllabus		2021 Onwards	
Course Objectives:						
The main objectives of this course are to:						
1. To facilitate the students to understand the structural features of Fibers and Yarn.						
2. To investigate techniques of textile fibers and yarn with its manufacturing Process.						
3. To Learn the Properties and behavior of Fibers and Yarn.						
4. To Gain knowledge in Advanced Spinning System.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Recognize the molecular conformations of various textile fibers.					K1
2	Explain the production process of various textile fibers and yarns.					K2
3	Utilize the Fibers and Yarns in different fields of Textile Industry.					K3
4	Analyze the structural investigations techniques of Fibers and Yarn.					K4
5	Outline the Properties and behavior of textile fibers and Yarns.					K2
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1	Introduction of Textile Fibers					
Introduction of textile fibers: Classification - Physical and chemical properties. Cotton: Botanical and commercial classification - Properties - End uses. Brief study about Organic cotton Flax: Properties - End uses. Brief study about organic cotton. Wool: Producing countries - Grading - Properties - End uses - Felting –Woolen and Worsted Yarns. Silk: Producing countries – Degumming – Weighting– Properties - End uses. Brief study on wild silk varieties.						
Unit:2	Filament Spinning System					
Methods of filament spinning. Semi synthetic fibers: Regenerated and modified cellulose -Viscose rayon process flow - HWM fibers - End uses –Brief study of Bamboo, Lyocell, Soya bean fibers.						
Unit:3	Polymer Science					
Polymer – Terminologies – Types of polymers & Polymerization. Synthetic fibers: Brief study about Polyamide, Polyester, Poly Acrylic and Spandex. Individual fiber properties and trade names–End uses. Drawing and effects. Texturization: definition, types, properties of textured yarn- its uses. Micro fibers.						
Unit:4	Yarn Production Process					
Classification of yarn types- Staple spinning system – Types. Yarn manufacturing Process:						
Ginning- objectives, Objectives and process sequence –Blow room, carding, Drawing, combing, simplex, ring frame, Comparison of carded and combed yarn. Principles and process sequence - Rotor spinning, Compact Spinning.						
Unit:5	Post Yarn Process					
Post spinning process: cone winding, Doubling, reeling- Ply yarn and single yarn Characteristics. Properties required for export quality hosiery yarns. Study of yarn twist and its importance - Various yarn & package defects. Yarn numbering systems. Blended textiles: Types of blending Benefits Double yarn Properties Uses. Classification of Sewing threads & applications core spun sewing thread – Advantages.						

<b>Text Book(s)</b>	
1	A Text Book of Fiber Science and Technology, Mishra, S.P, New Age International (P) Ltd Publishers, New Delhi 2000.
2	Spun Yarn Technology, Eric Oxtoby, Butterworth-Heinemann, Published in 1987.
3	The Motivate Series – Textiles, Wynne, A, Publisher : Macmillan Education Ltd., London, 1997.
4	Hand Book of Textile Fibers – Vol. I & Vol. II. Gordon Cook, J, Wood Head Publishing Ltd., Cambridge, England, 1984.
5	Man-made Fibers, Moncrieff, W, Butterworth Scientific Publication, 1975.
6	Handbook of Textile Fibers: Natural Fibers,J Gordon Cook , Woodhead publication Limited,1984.
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://textilelearner.blogspot.com/">https://textilelearner.blogspot.com/</a>
2	<a href="https://www.textiletoday.com.bd/category/innovations/fiber-yarn-fabric/">https://www.textiletoday.com.bd/category/innovations/fiber-yarn-fabric/</a>
3	<a href="https://study.com/academy/lesson/textile-yarns-definition-types-classification.html">https://study.com/academy/lesson/textile-yarns-definition-types-classification.html</a>



Course Code	FIBER & YARN SCIENCE - PRACTICAL		L	T	P	C
Core Practical- I			-	-	3	2
Basic Knowledge in Textiles and Science			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
1. To train the students on identification of different kinds of fibers based on different tests and measurement of properties of fibers. 2. To facilitate the students to understand the structural features of Fibers and Yarn. 3. To Learn the Properties and behavior of Fibers and Yarn						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Discover the natural and man-made fibres using various identification test methods.					P2
2	Determine the blend proportion of different fibers from the blended material.					P3
3	Calibrate the count and twist of the textile yarn.					P3
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>LIST OF EXPERIMENTS</b>						
1. Longitudinal view of Natural fibers A) Cotton B)Silk C)Wool 2. Longitudinal view of Manmade fibers A) Polyester B) Viscose C)Nylon 3. Burning characteristic of Natural fibers A) Cotton B)Silk C)Wool 4. Burning characteristic of manmade fibers A) Polyester B) Viscose C)Nylon 5. Solubility test of Natural fibers A) Cotton B)Silk C)Wool 6. Solubility test of manmade fibers A) Polyester B) Viscose C)Nylon 7. Determination of blend proportion of P/C blends 8. Determination of blend proportion of P/V blends 9. Determination of blend proportion of P/W blends 10. Determination of Yarn count 11. Determination of Yarn Twist						
<b>Text Books</b>						
1	Raoul Jewel, (2000), Encyclopedia of dress making, Delhi, APH Publishing Cooperation.					
2	Claire B. Schaeffer (1994), Fabric Sewing Guide, Lola, Wisconsin, Krause Publishers.					
3	Handbook of Textile fibers, Woodhead Publications, (1984).					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://nptl.ac.in/courses/116/102/116102026/">https://nptl.ac.in/courses/116/102/116102026/</a>					
2	<a href="https://onlinecourses.swayam2.ac.in/cec19_te01/preview">https://onlinecourses.swayam2.ac.in/cec19_te01/preview</a>					
3	<a href="https://textilelearner.blogspot.com/">https://textilelearner.blogspot.com/</a>					

Course Code		PATTERN MAKING & GRADING	L	T	P	C
Allied-I			4	-	-	4
Basic Knowledge in Textiles and Science			Syllabus	2021 Onwards		
Course Objectives:						
1. To enable the students to develop the ability to create design through flat pattern technique.						
2. To impart skills in dart manipulation.						
3. To enable the students to learn the skills of standardizing body measurements						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Infer about pattern making terminology and steps in taking body measurement.					K2
2	Summarize the pattern drafting techniques and fitting standards for different garments.					K2
3	Generalize the Pattern Draping techniques and its facts.					K2
4	Predict different pattern grades and fabric grains for cutting.					K3
5	Explain pattern alteration techniques and predict the various kinds of pattern layout.					K2
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1	BODY MEASUREMENTS					
Importance, Preparation for measuring, Girls and Ladies measurements, Boy's and Men's measurements. Standardizing body measurements, Importance, Techniques used. Relative length and girth measurements. Preparation of standardized measurement chart.						
Unit:2	DRAFTING					
Pattern making terminology, Methods of pattern making, Types of paper patterns, Pattern making tools, Steps in drafting Bodice front, Bodice back, Sleeve, Skirt front and back, Collar-one piece peter pan and shirt collar. Dart Manipulation, Technique-Slash and Spread method and Pivotal method. Study of commercial pattern, Merits & Demerits. Preparation of commercial pattern for kids. Fitting – Standards of a good fit, Steps in preparing a blouse for fitting, checking the fit of a blouse.						
Unit:3	DRAPING					
Draping -Definition and Meaning, Need for draping, Importance of Draping Technique, Advantages and Disadvantages, Tools and Equipments used for Draping, Preparation of dress form. Importance of grain, preparation of Muslin Material, straightening, tearing and pressing.						
Unit:4	GRADING AND PREPARATION OF FABRIC FOR CUTTING					
Grading, Introduction and importance of grading, Manual Grading of basic bodice – front and back, Sleeve, skirt and Collar, Computerized Grading. Basic terms: Grain, Selvage, On grain, Off Grain, Off Grain Print, With the Grain, Against the Grain, Importance of Grain in Fabric. Cutting-Preparing the Fabric for Cutting, Methods of straightening fabric ends, Methods of straightening fabric grain, shrinking fabrics.						
Unit:5	PATTERN ALTERATION AND LAYOUT					



Importance of altering patterns, Principles for pattern alteration, common pattern alteration in blouse. Pattern layout - Definition, Purpose, Rules in layout, Types of layout and Special layouts. Piecing, transferring pattern markings.

**Text Book(s)**

1	Mary Mathews, Practical Clothing Construction- Part I and II, - Cosmic Press, Madras,1990
2	Helen Joseph Armstrong, (2014).Pattern Making for FashionDesign.5 <sup>th</sup> editions. India:Dorling Kindersley
3	GayatriVerma, (2006).Cutting and Tailoring Course. New Delhi:Asian publishers.
4	Connie Amaden Crawford,(2005).The Art of Fashion Draping IIIEdition. OM Books International.
33	LoriA.Knowles,(2005).ThePracticalGuidetoPatternMakingforFashion Designers.NewYork:FairChild,Publications,Inc.

**Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]**

1	<a href="https://textilelearner.blogspot.com/2014/03/methods-off-garment-parttern-grading.html">https://textilelearner.blogspot.com/2014/03/methods-off-garment-parttern-grading.html</a>
2	<a href="https://www.threadsmagazine.com/2008/11/01/making-sense-of-pattern-grading">https://www.threadsmagazine.com/2008/11/01/making-sense-of-pattern-grading</a>
3	<a href="https://www.clothingpatterns101.com/pattern-grading.html">https://www.clothingpatterns101.com/pattern-grading.html</a>



# SECOND SEMESTER



Course Code		APPAREL MANUFACTURING MACHINERIES & EQUIPMENT	L	T	P	C
Allied-II			5	-	-	5
Basic Knowledge in Garment Machineries			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
1. To acquaint students of the basic production machinery and equipment used in apparel construction. 2. To learn about the garment industry. 3. To learn the working process of the various departments in garment industry.						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Describe the various machineries and process involved in fabric spreading and cutting.					K2
2	Generalize the types of garment production machineries and its application methods.					K2
3	Summarize the sewing machines and its special attachments for higher production.					K4
4	Explain the special machines and its functions in Garment Industry.					K2
5	Identify garment finishing machineries and its working principles.					K4
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit:1</b>		<b>Introduction to Garment Industry Process</b>				
Introduction to garment industry process details. Spreading machine: Types and working Procedures. Cutting machines: Types of cutting machines and its application – Detailed study on band knife, straight knife, drills & notches.						
<b>Unit:2</b>		<b>Classification of Garment Manufacturing Machines</b>				
Classification of garment manufacturing machines & applications. Studies on different sewing Machine – Lockstitch machine (chain stitch formation) - Features of advanced lock stitching machines. Over lock machine – Classification - Three thread over-lock machine – Stitch forming elements. Brief study on double needle lock stitch machine, flat lock machines.						
<b>Unit:3</b>		<b>Sewing Machine and its Details</b>				
Sewing machine shapes - Sewing machine bed types-Description and application of each bed – Flat bed - Cylinder bed - Post bed – Applications. Feed mechanisms – Types - Drop feed – Compound feed-Unison feed–Drop and variable top feed – Differential bottom and variable top feed (description of each type of feed mechanisms with sketch).						
<b>Unit:4</b>		<b>Machine Parts</b>				
Requirements – Guides – Types (edge & curve guide) - Compensating foot - Specialized presser Foot – Stitching jig- hem folders - Slack feeding and elastication – Cutting aids (threads, elastic and tapes) - Stacker. Simple automatics - Button hole – Button sew – Bar tack machine - Label sewers. Types and parts of machine needles – Needle sizes – Details of stand, table and motor for sewing machines.						



<b>Unit:5</b>	<b>Garment Finishing Process</b>
Introduction to various machines for garment finishing – Fusing – Sucking – Ironing - Packing. Pressing-Purpose of pressing –Categories of pressing-The means of pressing-pressing equipment and methods-Iron and steam presses. Packaging-Types of package forms-Types of packaging materials-Quality specification of packaging materials-Merchandising Packaging-Shipment packaging-Selection of package design.	
<b>Text Book(s)</b>	
1	The Technology of Clothing Manufacture, Harold Carr and Barbara Latham, Publication by Blackwell Science Ltd, England 1994.
2	Introduction to Clothing Manufacture, Gerry Cooklin, Publication by Blackwell Science Ltd, England 1991.
3	Terry Bracken bury, Knitted Clothing Technology, Publication by Blackwell Science Ltd, England, 1992.
4	Clothing Construction and Wardrobe Planning, Dora.S.Lewis, Mabel Goode Bowers and Marietta Kettunen, Publication by The Macmillan Company, New York, 1955.
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.onlineclothingstudy.com/2018/05/machinery-needed-for-garment.html">https://www.onlineclothingstudy.com/2018/05/machinery-needed-for-garment.html</a>
2	<a href="https://garmentsmerchandising.com/garment-machine-function/">https://garmentsmerchandising.com/garment-machine-function/</a>
3	<a href="https://dir.indiamart.com/indianexporters/m_textmch.html">https://dir.indiamart.com/indianexporters/m_textmch.html</a>

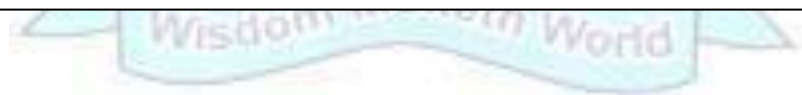


Course Code		BASIC APPAREL DESIGNING- PRACTICAL	L	T	P	C
Core Practical-II			-	-	4	2
Basic Knowledge in Garment Machineries			Syllabus		2021 Onwards	
Course Objectives:						
1. To impart practical exposure in sewing operation. 2. To acquaint students with the knowledge on basic sewing techniques. 3. To impart the knowledge and skills required for garment designing.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Manipulate the various seams, seam finish and bias finishing techniques.					P2
2	Customize the fullness methods, placket and fasteners attachments in garment.					P4
3	Construct the various body parts of a garment.					P4
P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.						
1. Preparation of Samples for Seams and Seam Finishes. 2. Preparation of Samples for Hems. 3. Preparation of Samples for Facing and binding.(Any2) 4. Preparation of Samples for Fullness. (Darts, Tucks, Pleats, Gathers, Flares, Ruffles, Godets and Gathers) 5. Preparation of Samples for Plackets and fasteners.(Any2) 6. Preparation of Samples for different Sleeves.(Any2) 7. Preparation of Samples for different Collars.(Any2) 8. Preparation of Samples for different Yokes.(Any2) 9. Preparation of Samples for different pockets(Any2)						
Text Book(s)						
1.	Gayatri Verma and Kapil Dev,(2006). <i>Cutting and Tailoring Course</i> . New Delhi: Asian Publishers					
2	KR Zarapker, (2005). <i>Zarapker System of Cutting</i> .New Delhi: Navneet Publications Ltd.					
3	Thangam Subramaniam,(2006). Dress Making- Bombay Tailoring and Embroidery College					
4	Ruth Sleigh Johnson,(2011).Practical sewing techniques. London :A&C Black publishers					
Related Websites						
1	<a href="https://ecourseonline.iasri.res.in/mod/page/view.php?id=114171">https://ecourseonline.iasri.res.in/mod/page/view.php?id=114171</a>					
2	<a href="https://www.fibertofashion.com/industry-article/5658/basic-of-pattern-making">https://www.fibertofashion.com/industry-article/5658/basic-of-pattern-making</a>					
3	<a href="https://www.clothingpatterns101.com/style-lines.html">https://www.clothingpatterns101.com/style-lines.html</a>					

Course Code		BASIC ILLUSTRATION & SKETCHING - PRACTICAL	L	T	P	C
Allied Practical-I			-	-	3	2
Basic Knowledge in Garment Machineries			Syllabus		2021 Onwards	
Course Objectives:						
1. Students will learn the basic objects drawing and shades. 2. They will learn basic head theories and draw human figures at different angles 3. They will create garment design for various seasons on fashion figures.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Compose various types of garment and its parts					P4
2	Design different kinds of accessories and ornaments					P4
3	Deconstruct the various head theories of human figures, features and different positions of body parts.					P3
P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.						
1. Different types of collar, Sleeve, Neckline and skirts. 2. Different types of ladies tops, Shirt, Pant(Full and half) 3. Different types of Accessories – Bags ,footwear , hats etc 4. Different types of Ornaments 5. Facial features – Eyes ,nose , lips, Ears 6. Face ,hands legs – Different positions 7. Lay figure -7 1/2 head 8. Fashion figure -8 , 10 ,12 head.						
Text Book(s)						
1	Patric John Ireland, Fashion Design Illustration –Women, B.T.Batsfort Ltd, London(1993).					
2	Patric John Ireland, Fashion Design Drawing and Presentation, B.T.Batsfort Ltd, London(1982).					
3	Patric John Ireland, Fashion Design Illustration –Men, B.T. Batsfort Ltd, London(1996).					
4	Wolfgang. H. Hageney, Checks And Stripes –Classic Variations in Colour Vol.I, Belveden(1997).					

A decorative border resembling a scroll, with a grey circular element at the top right and a grey semi-circle at the top left.

# THIRD SEMESTER



Course Code		WOVEN FABRIC SCIENCE	L	T	P	C
Core-II			5	-	-	5
Basic Knowledge in Garment Machineries			Syllabus		2021 Onwards	
Course Objectives:						
1. To impart knowledge on woven fabrics						
2. To help students understand fabric formation process.						
3. To impart knowledge on woven fabric Designs and Structures.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Clarify the preparatory processes involved in the woven fabric production.					K2
2	Explain the principles of sizing process and its methods.					K2
3	Infer about the basic mechanism of loom and its structure.					K2
4	Categorize the woven fabrics and its structure					K4
5	Differentiate the types of looms and jacquard mechanisms involved in woven fabric production.					K4
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1	Preparatory Process					
Classification of fabric forming methods – Weaving preparatory processes - Objects of winding process – Winding types – Passage of material through high-speed automatic cone winding machine – Passage of material through precision winding machine – Winding terminologies, open wind and close wind – Winding defects, causes & remedies. Pirn winding – Objects - Passage of material through an automatic high speed pirn winder.						
Unit:2	Sizing Process					
Objects of warping – Types of warping – Passage of material through high-speed modern beam warping machine & sectional warping machine – Warping defects, Causes & remedies. Objects of sizing – comparison of two cylinder, multi cylinder & hot air sizing machines – Sizing ingredients & their functions – Size paste preparation – Sizing defects, causes & remedies						
Unit:3	Basic Mechanisms of Looms					
Passage of material through a plain power loom – Basic mechanisms of a loom – Primary, secondary & auxiliary motions – Tappet shedding – Cone over pick & under pick mechanisms – Beat up mechanism – Types of let off & take up mechanisms – Fabric defects, causes & remedies						
Unit:4	Weaving and its types					
Introduction to weaves – Weave diagram – Plain weave & derivatives – Twill weave & derivatives – Satin & sateen weaves – Ordinary and Brighten Honey Comb; Huck-a-Back; Mock Leno; extra warp and extra weft figuring – single and double colour.						
Unit:5	Loom types					
Objects of dobby & jacquard mechanisms – Types of dobby & jacquard – Study of negative & positive dobbies – Study of single cylinder & double cylinder jacquard mechanisms. Shuttle less looms: Introduction - Advantages - Types of shuttle less looms: projectile, rapier, air jet, water jet and multi phase weaving.						



<b>Text Book(s)</b>	
1	R.Marks, A.T.C. Robinson, Principles of Weaving, The Textile Institute, Manchester(1976)
2	B.Hasmukhrai, Fabric Forming, SSM ITT Co operative stores Ltd, Komarapalayam(1996).
3	K.T.Aswani, Fancy Weaving Mechanism, Mahajan Book Distributors, Ahmadabad(1990).
4	N.Gokarneshan, Fabric Structure and Design, New Age International Publishers,New Delhi(2004).
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs-introduction-to-woven-fabric/">https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs-introduction-to-woven-fabric/</a>
2	<a href="https://www.textileschool.com-453-wovendesign-">https://www.textileschool.com-453-wovendesign-</a>
3	<a href="https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric">https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric</a>



Course Code		WOVEN FABRIC SCIENCE PRACTICAL	L	T	P	C
Core Practical-III			-	-	3	2
Basic Knowledge in Garment Machineries			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
<div>1. To impart the knowledge about the physical property of textile &amp; their testing procedures and to develop an understanding of the principles involved in testing.</div> <div>2. To identify the different types of weaves</div> <div>3. To understand the woven fabrics designs</div>						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to						
1	Calibrate design, draft and peg-plan for simple woven fabrics.					P3
2	Determine the designs for decorative woven fabrics.					P3
3	Formulate the draft and peg-plan for decorative woven fabrics					P3
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<div>1. To analyse the following particulars of the woven fabrics: Woven structural analysis: Design, Draft, Peg-plan</div> <div>2. Plain weave and its derivatives</div> <div>3. Twill weaves – 2/1, 3/1.</div> <div>4. Satin / Sateen</div> <div>5. Honey comb</div> <div>6. Huck – a – back</div> <div>7. Crepe weaves</div> <div>8. Extra Warp</div> <div>9. Extra Weft</div> <div>10. Mock leno</div> <div>11. Pile weave</div> <div>12. Fancy weave</div>						
<b>Text Book(s)</b>						
1	Principles of weaving, R. Marks, A.T.C. Robinson, Publication by the textile institute Manchester (1976)					
2	Fabric forming, B. Hasmukhroi, Publication by SSM ITT Cooperative stores Ltd, Komarapalayam (1996)					
3	Weaving mechanism Vol 1 & Vol 2, Prof. N.N. Banerjee, Published by Srimati. Tandra Banerjee, West Bengal (1999)					
4	Mechanism of Weaving machines, Prof. J.L. Chakravorty, Srimati B. Chakravorty, Serapur, Publication by West Bengal, 1984					
5	Handbook of Weaving, Sabit Adanur, Technomic publishing Company, Inc, USA (2001)					

**Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]**

1	<a href="https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs-introduction-to-woven-fabric/">https://www.cottonworks.com/topics/sourcing-manufacturing/weaving/basic-woven-designs-introduction-to-woven-fabric/</a>
2	<a href="https://www.textileschool.com-453-wovendesign-">https://www.textileschool.com-453-wovendesign-</a>
3	<a href="https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric">https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric</a>





Course code	KNITTING & NON-WOVEN		L	T	P	C
Core-III			5	-	-	5
Basic knowledge about fabric structure			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Familiarize with the basics of knitting process						
2. Impart knowledge on the warp and weft knitting techniques						
3. To know the recent trends and technologies adopted in the industry						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Outline basics of knitting process and knitting machine process functions.					K2
2	Summarize the warp and weft knitting process and its production techniques.					K3
3	Explain seamless knitting and care of knitted fabric maintenance.					K2
4	Generalize non woven fabric production process and its uses					K2
5	Infer about technical textiles applications and its types.					K2
<b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b>						
<b>Unit:1</b>		<b>Knitting Overview</b>				
Knitting – Definition, classification and history, characteristics of knitted goods. General terms and principles of knitting technology, machine knitting, parts of machine, knitted loop structure, stitch density						
<b>Unit:2</b>		<b>Principles of Weft &amp; Warp Knitting Technology</b>				
Weft knitting – classification - circular rib knitting machine, purl, interlock, jacquard - single jersey machine - basic knitting elements - types and functions – knitting cycle, CAM – system - 3-way technique to develop design - knit, tuck, miss - effect of stitches on fabric properties.						
Warp knitting - lapping variations-tricot, raschel, simplex and Milanese - kitten raschel - single bar, 2 bar, multi bar machines. types of threading, production of nets, curtains, heavy fabrics, elasticized fabrics.						
<b>Unit:3</b>		<b>Seamless Knitting &amp; Knitting Care</b>				
Seamless Knitting – Applications, advantages, and limitations. Care and maintenance of knitted material - washing, drying, ironing, storing. Common defects that occur in knitted fabric production.						
<b>Unit:4</b>		<b>Non-woven</b>				
Non-woven- Introduction, Definition, Classification, scope & applications of Non-woven- Fibers used- web preparation, opening, cleaning machine, production of parallel laid web, cross laid, and random laid web. Bonding methods- mechanical, thermal, chemical.						
<b>Unit:5</b>		<b>Technical Textiles</b>				
Introduction, Definition, scope and importance & uses. Applications of agro-tech, build-tech, cloth-tech, home-tech, indu-tech, mechanical-tech, sports-tech, pack-tech, mobile-tech, protect-tech, geo-tech, medical-tech.						
<b>Text Book(s)</b>						
1	Knitting Manufacture Technology - Anbumani, New Age International, Chennai ,2006					
2	Knitting and Apparel Technology, S.S.M.I.T Co-operative Society. 2005					
3	Knitting Technology, David J. Spencer, Woodhead Publishing Ltd., Cambridge England, 2002					
4	Knitting Technology, D B Ajgaonker, Universal Publishing Corporation,1998					
5	Geotextiles- N.W.M. John, Blackir, London.					
6	Non-woven, Arul Dhakiya, M.G. Kamath, Raghavendra, R. Hedge & Monica Kannadnguli					

Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]	
1	<a href="https://fashion2apparel.blogspot.com/2017/02/seamless-garments-advantages.html">https://fashion2apparel.blogspot.com/2017/02/seamless-garments-advantages.html</a>
2	<a href="https://www.indiaretailing.com/2018/06/12/fashion/indian-knitwear-market-present-and-the-future-trends/">https://www.indiaretailing.com/2018/06/12/fashion/indian-knitwear-market-present-and-the-future-trends/</a>
3	<a href="https://www.fibre2fashion.com/industry-article/64/overview-of-tirupur-knitwear-industry">https://www.fibre2fashion.com/industry-article/64/overview-of-tirupur-knitwear-industry</a>
4	<a href="https://www.fibre2fashion.com/industry-article/7047/seamless-garment-technology">https://www.fibre2fashion.com/industry-article/7047/seamless-garment-technology</a>
5	<a href="https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html">https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html</a>



Course code		KNIT FABRIC DESIGN & ANALYSIS	L	T	P	C
Core Practical-IV				-	3	2
Basic knowledge about knit fabric				Syllabus		2021 Onwards
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Identify the loop structure of the fabric						
2. Identify different types of knitted fabric sample						
3. Identify fabric defects, its cause and work on the remedies						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Discover loop structure and graphical representation of weft knit fabrics					P3
2	Determine the loop structure and graphical representation of warp knit fabrics					P3
3	Classify the different defects from the knitted fabrics.					P4
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>1. Identify the Given Fabric Sample Using Unravel and Graphic Representation Method</b>						
<ul style="list-style-type: none"><li>• Plain Knit</li><li>• Rib Knit</li><li>• 1x1</li><li>• 2x2</li><li>• Interlock</li><li>• Pique – any 2structures</li><li>• Tricot</li><li>• Raschel</li></ul>						
<b>2. Analyze the Defects</b>					<b>30 hours</b>	
<ul style="list-style-type: none"><li>• Vertical and horizontal lines</li><li>• Holes and cuttings</li><li>• Distorted</li></ul>						
<b>Text Book(s)</b>						
1	Knitting Manufacture Technology, Anbumani, New Age International, Chennai ,2006					
2	Knitting and Apparel technology, S.S.M.I.T Co-operative Society. 2005					
3	Knitting Technology, D B Ajgaonker, Universal Publishing Corporation,1998					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html">https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html</a>					
2	<a href="https://sciencedirect.com/topic/engineering/knitting-technology">https://sciencedirect.com/topic/engineering/knitting-technology</a>					
3	<a href="https://nptl.ac.in/course/116/102/116102008/">https://nptl.ac.in/course/116/102/116102008/</a>					

Course code		CHILDREN'S APPAREL PRACTICAL	L	T	P	C
Core Practical-V			-	-	5	3
Basic knowledge about knit fabric				Syllabus		2021 Onwards
Course Objectives:						
1.Designing, drafting and constructing the following garments for the features Prescribed						
2.List the measurements required and materials suitable Calculate the cost of the garment						
3.Calculate the material required-Layout method and direct measurement Method						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Design and generalize the measurements for the various kids' garments.					P3
2	Prepare patterns and calculate material requirement for the designed kid's wear.					P3
3	Construct the designed kid's garment and calibrate the cost of the garment.					P5
P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.						
1. Bib- Variation in outline shape						
2. Panty-plain or plastic lined panty						
3. Jabla- without sleeve, front open (or) Magyar sleeve, back opens						
4. Baba suit- knicker with chest piece attached (or)Romper						
5. A-Line Frock- double pointed dart, neck line and arm hole finished with facing						
6. Summer frock- with suspenders at shoulder line, without sleeve/collars(or) Angel top with raglan sleeve, fullness at neck line						
7. Yoke frock- yoke at chest line, with open, puff sleeve, gathered skirt9OR0 frock-with collar, without sleeve, gathered/ circular skirt at waist line(or) Princess line frock						
8. Knicker- elastic waist, side pockets.						
9. Shirt- open collar, with pocket						
Text Book(s)						
1	Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai(1986)					
2	Zarapker System of Cutting- Zarapker. K. R, Navneet Publicationsltd.					
3	Cutting & Tailoring course, Gayathri Verma & Kapil Dev, Computech Publications					
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]						
1	<a href="https://epgp.inflibnet.ac.in/home/viewsubject?catid=827">https://epgp.inflibnet.ac.in/home/viewsubject?catid=827</a>					
2	<a href="https://www.youtube.com/watch?v=LuazkYL0j3a">https://www.youtube.com/watch?v=LuazkYL0j3a</a>					
3	<a href="https://www.youtube.com/watch?v=nI-shbmnuVg">https://www.youtube.com/watch?v=nI-shbmnuVg</a>					



Course code		FASHION DESIGNING	L	T	P	C
Allied-III			4	-	-	4
Have basic knowledge in designing			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Impart knowledge on design concepts in the field of fashion						
2. Familiarize with the fashion cycles, consumers and theories						
3. Design suitable garments for unusual figure types						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Distinguish fashion and differentiate elements and principles of design					K2
2	Generalize the colour combinations with standard colour harmonies					K3
3	Interpret the fashion evolution, consumer groups in fashion theories and forecasting.					K4
4	Justify the different dress designs for unusual figure types					K4
5	Describe fashion terminologies and fashion profiles					K2
<b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b>						
<b>Unit:1</b>		<b>Design Elements and Principles</b>				
Design- definition and types – structural and decorative design, requirements of a good structural and decorative design in dress						
Elements of design and its application in dress – line, shape or form, colour and texture. Principles of design and its application in dress – balance, rhythm, emphasis, harmony and proportion.						
<b>Unit:2</b>		<b>Standard Colour Harmonies</b>				
Colour theories; Prang colour chart Dimensions of colour- hue, value, and intensity.						
Standard colour harmonies – Related, Contrasting and Neutral colour harmony; Application of Colour in principles of design- application of the same in dress design.						
<b>Unit:3</b>		<b>Fashion Evolution and Fashion Forecasting</b>				
Fashion evolution – Fashion cycles, Length of cycles , consumer groups in fashion cycles – fashion leaders , fashion innovators, fashion motivation , fashion victim, Fashion followers. Adoption of Fashion theories – Trickle down, trickle up and trickle across. Fashion forecasting – Need for forecasting						
<b>Unit:4</b>		<b>Designing Dresses for Unusual Figures</b>				
Deigning dresses for unusual figures – becoming and unbecoming – for the following figure types. Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead						
<b>Unit:5</b>		<b>Fashion Terminologies and Fashion Profiles</b>				
Definition and meaning of the fashion terms – fashion, style, line and collection, Mannequin and dress forms; fashion show; high fashion; Haute couture, couture and couturier; knock-off; Avant Garde; Pret – a –porter. Role/qualities of a Fashion Designer, Fashion Stylist, Fashion Journalist, Fashion Merchandiser, Fashion Director.						

<b>Text Book(s)</b>	
1	Fashion Sketch Book – Bina Abbing, Fair Child Publications, New York Wardrobe, 1988.
2	Art and Fashion in Clothing Selection – Mc Jimsey and Harriet, Iowa State University Press, Iowa, 1973.
3	Fashion from Concept To Consumer – Frings Gini Stephens, Pearson Education, US, 1998.
4	Inside the Fashion Business – Kitty G. Dickerson, Pearson Education, US, 2007.
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.apparesearch.com/terms/index.html">https://www.apparesearch.com/terms/index.html</a>
2	<a href="https://www.instyle.com/fashion">https://www.instyle.com/fashion</a>
3	<a href="https://prezi.com/1tlwgnhviqs-/fashion-elements-and-principles-of-design/">https://prezi.com/1tlwgnhviqs-/fashion-elements-and-principles-of-design/</a>



Course code		FASHION DESIGNING PRACTICAL	L	T	P	C
Allied Practical-III			-	-	3	2
Knowledge in Fashion Sketching			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Familiarize with the elements and principles of design						
2. Play with colours following the standard colour harmonies						
3. Create garment design for various seasons on fashion figures						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Demonstrate Prang colour chart, value and intensity chart					P3
2	Calibrate various head theories and figures for a child, women and men					P3
3	Sketch garment designs by using elements of design and also the applications of principles of design.					P4
4	Develop colour harmonies in garment design and design garments for various seasons.					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>1. Prepare the following Charts</b>						
<ul style="list-style-type: none"><li>• Prang colour chart,</li><li>• Value chart</li><li>• Intensity chart</li></ul>						
<b>2. Illustrate Human Figure for the Following Heads</b>						
<ul style="list-style-type: none"><li>• Child - 6head</li><li>• Women – 8 head,10 head and 12 head</li><li>• Man – 10head</li></ul>						
<b>3. Illustrate Garment Designs for the Elements of Design (3 each)</b>						
<ul style="list-style-type: none"><li>• Line</li><li>• Texture</li><li>• Shape</li></ul>						
<b>4. Illustrate Garment Designs for the Principles of Design</b>						
<ul style="list-style-type: none"><li>• Balance (Formal and Informal)</li><li>• Harmony</li><li>• Emphasis</li><li>• Proportion</li><li>• Rhythm (by Repetition, Gradation and Line Movement)</li></ul>						
<b>5. Illustrate the Colour Harmony in Dress Design</b>						
<ul style="list-style-type: none"><li>• Monochromatic</li><li>• Analogous</li><li>• Complimentary</li></ul>						

<ul style="list-style-type: none"> <li>• Double complementary</li> <li>• Split complementary</li> <li>• Triad</li> <li>• Neutral</li> </ul>	
<b>6. Create Garments for the Following Seasons</b>	
<ul style="list-style-type: none"> <li>• Summer</li> <li>• Winter</li> <li>• Autumn</li> <li>• Spring</li> </ul>	
<b>Text Book(s)</b>	
1	Fashion Sketch Book , Bina Ablng, Fair Child Publications, New York Wardrobe,1988.
2	Illustrating Fashion, Kathryn McKelvey and Janine Munslow, Blackwell Science,1997.
3	Art and Fashion in Clothing Selection , Mc Jimsey and Harriet, Iowa State University Press, Jowa,1973.
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.idrawfashion.com/">https://www.idrawfashion.com/</a>
2	<a href="https://www.fashionistasketch.com/drawing-faces-fashion-illustration/">https://www.fashionistasketch.com/drawing-faces-fashion-illustration/</a>
3	<a href="https://in.pinterest.com/pin/458804280762797371/">https://in.pinterest.com/pin/458804280762797371/</a>





Course code		FUNDAMENTALS OF TEXTILES	L	T	P	C
		NMEC_I	2	-	-	2
		Have basic knowledge in designing	Syllabus		2021 Onwards	

#### Course Objectives:

1. The subject aims to make the students different types of fabrics, yarn & its use.
2. To facilitate the students to understand the structural features of Fibers and Yarn.
3. To investigate techniques of textile fibers and yarn with its manufacturing Process.

#### Expected Course Outcomes:

On the successful completion of the course, student will be able to:

1	Categorize textile fibres and its characteristics.	K2
2	Interpret the manufacturing process, properties and uses of different textile fibres	K2
3	Explain fibre spinning methods and categorize different kind of yarns.	K2
4	Infer about woven fabric production and the constructional parameters of fabric.	K2
5	Generalize the non woven fabric production process and its application.	K2

**K1** - Remember; **K2** - Understand; **K3** - Apply; **K4** - Analyze; **K5** - Evaluate; **K6** – Create

#### Unit:1 Fiber Classification

Introduction to the field of Textiles–classification of fibers–natural and chemical–primary and secondary characteristics of textile fibers.

#### Unit:2 Fiber properties and uses

Manufacturing process, properties and uses of natural fibers–cotton, linen, jute, pineapple, hemp, silk, wool, hair fibres, Man-made-fibres – viscose rayon, acetate rayon-nylon, polyester, and acrylic.

#### Unit:3 Spinning & Yarn Classification

Spinning – definition, classification – chemical and mechanical spinning – blending, opening, cleaning, doubling, carding, combing, drawing, roving, spinning-Yarn classification – definition classification – simple fancy yarns, sewing threads and its properties .

#### Unit:4 Woven

Woven–basic weaves – plain twill, satin, fancy weaves – pile, double cloth, leno, swivel, tappet, dobby and jacquard, weaving technology-process Sequence–machinery details.

#### Unit:5 Non-Woven

Non- woven- felting, fusing, bonding, lamination, netting, braiding and calico, tatting and crocheting

Role/qualities of a Fashion Designer, Fashion Stylist, Fashion Journalist, Fashion Merchandiser, Fashion Director.

#### Text Book(s)

- 1 Fashion Sketch Book – Bina Abbing, Fair Child Publications, New York Wardrobe,1988.
- 2 Fashion from Concept To Consumer – Frings Gini Stephens, Pearson Education, US, 1998.

#### Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]

- 1 <https://nptl.ac.in/courses/116/102/116102026/>
- 2 <https://www.intechopen.com/books/advances-in-modern-woven-fabric-technology/color-and-weave-relationship-in-woven-fabric>
- 3 <https://textilelearner.blogspot.com/2013/01/faultsdefects-in-knitted-fabrics.html>

# FOURTH SEMESTER



Course Code		TEXTILE TESTING & QUALITY CONTROL	L	T	P	C
Core-V			3	-	-	3
Basic knowledge in textile fibers, yarns & fabrics			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Instruct about various test for yarns, fabrics & garments						
2. Describe about various levels of inspection & its procedure in apparel production						
3. Describe about various norms & standards followed in testing and inspection						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Explain the testing procedure for various yarn parameters					K2
2	List out the specifications for various woven & knitted fabrics					K2
3	Differentiate the various systems used for fabric inspection					K4
4	List out the possible defects and its causes in apparel production					K2
5	Differentiate the categories of defects in garment and the various standards followed in apparel testing					K4
<b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b>						
<b>Unit:1</b>		<b>Yarn Testing</b>				
Importance of Quality. Quality terminologies. Testing: Objectives of Testing - atmospheric conditions for testing lab. Identification of textile fibers. Yarn numbering systems – Determination of yarn count. Yarn strength testing & CSP. Testing of yarn evenness, yarn twist & Hairiness Measurement						
<b>Unit:2</b>		<b>Fabric Testing</b>				
Knitted fabric specifications – Testing of Dimensional stability, Spirality & Bowing. Testing of colour fastness to washing, rubbing, perspiration & light - Grey scales and ratings. Brief study about testing of woven fabric.						
<b>Unit:3</b>		<b>Raw material Inspection</b>				
Inspection: Definition - Types of Inspection. Raw materials inspection: fabric inspection systems & Testing of Sewing thread, zippers, Buttons.						
<b>Unit:4</b>		<b>In process inspection</b>				
In process inspection and its significance in apparel quality. Defects in Sewing, Ironing & Packing. Testing of Seam strength & seam slippage						
<b>Unit:5</b>		<b>Final Inspection &amp; Standards</b>				
Final inspection procedures. Categories of defects. Package quality testing – care labels. Brief study about Testing Standards. Brief study about Oeko-Tex Standards.						
<b>Text Book(s)</b>						
1	Physical Testing of Textiles,1st Edition, B P Saville, Woodhead Publishing, 1999					
2	Managing Quality in Apparel Industries, Pradeep V Metha & Satish K. Bhardwaj, NIFT, 1998					
3	Stamper, Evaluating apparel quality, Sue Humphries Sharp, Linda Donnell & Anitha A Fairchild Books, 1991					
4	Textile Testing, Arindam Basu, South India Textile Research Association, 2006					

Related websites	
1	<a href="http://textilemerchandising.com/quality-assurance-and-quality-control/">http://textilemerchandising.com/quality-assurance-and-quality-control/</a>
2	<a href="https://insight-quality.com/garment-quality-control-procedures/">https://insight-quality.com/garment-quality-control-procedures/</a>
3	<a href="https://garmentsmerchandising.com/acceptable-quality-level-apparel-industry/">https://garmentsmerchandising.com/acceptable-quality-level-apparel-industry/</a>
4	<a href="http://texhour.com/aql-and-type-of-defects">http://texhour.com/aql-and-type-of-defects</a>



Course code		TEXTILE WET PROCESSING	L	T	P	C
Core-VI			3	-	-	3
Basic knowledge in textile finishing			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Dye and Print the fabrics the using suitable dyes and prints						
2. Prepare on Effluent and its impact						
3. Prepare the fabric for finishing						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Generalize the pre-preparatory process sequence in a textile industry					K2
2	Explain the types of finishes used in textile materials					K2
3	Discover the textile dyes and dyeing methods					K3
4	Infer about direct printing methods					K2
5	Outline about discharge printing and the need for effluent treatment					K2
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit:1</b>	<b>Wet Processing Process and Basic Finishes</b>					
Process sequence of textile wet processing; Finishes types – Basic finishes, Aesthetic finishes, Functional finishes and Special purpose finishes. Basic Finishes – Singeing, desizing, scouring, bleaching and mercerizing – Process sequence and methods.						
<b>Unit:2</b>	<b>Aesthetic, Functional and Special Finishes</b>					
Aesthetic finish– glazed, Moire, embossed, napped finish Functional finish – Water repellant, flame retardant, antistatic finish Special purpose finish – fragrance, antibacterial, stone wash and enzyme wash in denim Recent trends – Microencapsulation and nano finishes.						
<b>Unit:3</b>	<b>Dyes and Dyeing Machines</b>					
Dyes – classification and suitability of dyes to the fabric, stages of dyeing – fiber, yarn, fabric and garment dyeing, Natural dyes and its significance, Dyeing machines – loose stock fiber bale – hank package – jigger – winch – HT& HP Beam, jet – padding mangles. Garment dyeing machines						
<b>Unit:4</b>	<b>Direct Printing</b>					
Printing – Difference between dyeing and Printing. Preparation of Printing Paste, Properties and types of Thickeners, Direct Printing – Block Printing - History and techniques used. Screen Printing – Flat screen and Rotary screen, techniques used.						
<b>Unit:5</b>	<b>Resist, Discharge Printing and Effluent Treatment</b>					
Discharge Printing, other methods – Digital Printing, Heat transfer printing Effluent Treatment – Pollution created by the processing unit, Process sequence in Effluent treatment Plant.						
<b>Text Book(s)</b>						
1	Textile Chemistry, Paters R.H, Elsevier Publishing , 1967.					
2	Technology of Textile Processing, Shenai V.A., Sevak publications, Bombay, 1981.					
3	Textile Finishing , Shenai.V.A. Sevak Publications, Mumbai, 1999.					
4	Functional Finishes, Menachem Lewin and Stephen B. Sello, Marcel Dekker, Inc., 1984.					
5	Textile Finishing, R.S.Prayag, Shree J Printers, India, 1994.					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://textilecourse.blogspot.com/2018/08/working-process-printing-">https://textilecourse.blogspot.com/2018/08/working-process-printing-</a>					
2	<a href="http://www.neoakruthi.com/blog/etp-for-textile-industry.html">http://www.neoakruthi.com/blog/etp-for-textile-industry.html</a>					
3	<a href="https://textilelearner.blogspot.com/2011/08/flow-chart-of-wet-processing-process.html">https://textilelearner.blogspot.com/2011/08/flow-chart-of-wet-processing-process.html</a>					
4	<a href="https://www.textileschool.com/343/fabric-wet-processing-techniques/">https://www.textileschool.com/343/fabric-wet-processing-techniques/</a>					
5	<a href="https://www.fibre2fashion.com/industry-article/1699/special--finishes-to-garment-an-overview">https://www.fibre2fashion.com/industry-article/1699/special--finishes-to-garment-an-overview</a>					



Course code		WOMEN'S APPAREL PRACTICAL	L	T	P	C
Core Practical-VI			-	-	6	3
Basic knowledge about knit fabric				Syllabus		2021 Onwards
<b>Course Objectives:</b>						
The main objectives of this course are to: 1. Design Garments for women 2. Impart Skills in pattern drafting 3. Construct garments by sewing						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Design and generalize the measurements for the various women's' garments.					P3
2	Prepare patterns and calculate material requirement for the designed women's wear.					P3
3	Construct the designed women's garment and calibrate the cost of the garment.					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>Calculate the material required –Layout method and Direct measurements method</b>						
1. Saree Petticoat- Six Panel, Decorated bottom.						
2. Skirts – Circular/umbrella/panel with style variations.						
3. Blouse- front open, Fashioned neck, Waist band at front, with sleeve.						
4. Salwar (or) Churidhar (or) Parallels (or) Bell Bottom						
5. Kameez – with /without slit, with or without flare ,with /without opening ,with or without panels, with /without yoke.						
6. Nightie –With yoke, front open , with sleeve , full length.						
7. Ladies pant- waist band , zip attached ,tight fitting / parallel pants.						
8. Short kurta / top – Decorative / surface design in tailored placket, with or without collar.						
<b>Text Book(s)</b>						
1	Scientific garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011					
2	Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai(1986)					
3	Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college 32					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://www.patternsonline.com-default.aspx">https://www.patternsonline.com-default.aspx</a>					
2	<a href="https://shoeguide.com/">https://shoeguide.com/</a>					

Course code		TEXTILE WET PROCESSING PRACTICAL	L	T	P	C
Core Practical-VII			-	-	6	3
Basic knowledge about knit fabric				Syllabus		2021 Onwards
<b>Course Objectives:</b>						
The main objectives of this course are to: 1. To gain a practical on-hand training on preparatory process. 2. To understand the technical importance of wet processing. 3. To plan various process requirements for dyeing.						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Prepare the samples by pre-treatment process and calculate weight loss percentage.					P5
2	Formulate the recipe for the fabric sample dyeing					P5
3	Produce the sample by formulated recipe and calibrate shade percentage.					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>Preparation of samples for Processing:</b> ➤ Desizing ➤ Scouring ➤ Bleaching ➤ Mercerising  <b>Dye the given fabric using suitable dye:</b> ➤ DirectDye ➤ SulphurDyes ➤ VatDye ➤ DisperseDye ➤ ReactiveDyes ➤ AcidDye						
<b>Text Book(s)</b>						
1	AATCC Garment wet processing Technical manual (1994)					
2	Textile processing and properties, Preparation, Dyeing, Finishing & Performance, Tyrone L. Vigo, elsewhere publishing, Netherland					
3	Textile Wet processing, Manoj Dole, Manoj Dole Publications Co. India (2018)					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://britannica.com/topic/textile/dyeing-and-printing">https://britannica.com/topic/textile/dyeing-and-printing</a>					
2	<a href="https://www.sciencedirect.com/topics/engineering/dyeing-process">https://www.sciencedirect.com/topics/engineering/dyeing-process</a>					

Course code		HOME TEXTILES	L	T	P	C
Allied-IV			3	-	-	3
Knowledge about choice of fabrics for Home Textiles			Syllabus		2021 Onwards	
Course Objectives:						
The main objectives of this course are to: 1. Impart knowledge on the various home textile products 2. Gain insights on the bed linens, kitchen linens, bathroom linens 3. Acquire better understanding on the choice of fabrics for the home textile products						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Classify the home textile products and list out the fabric selection factors.					K2
2	Categorize the types of floor and wall coverings in home textiles.					K4
3	Distinguish doors and window treatments in home furnishing					K4
4	Generalize the furnishing used in living room.					K2
5	Discover the furnishing types of kitchen and dining.					K4
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1		Introduction to Home textiles				
Introduction to home textiles, definition, types of home textiles, factors influencing selection of home textiles, recent trends in home textiles.						
Unit:2		Floor and wall coverings				
Floor and wall coverings – definition, types of floor covering –hard, soft and resilient floor coverings and uses and care and maintenance of floor coverings. Wall covering- definition, uses, care and maintenance of wall coverings.						
Unit:3		Door and Window treatments				
Door and window treatments –definition and parts of door and windows, curtains and draperies – definition and materials used for curtains and draperies. Types of Curtains –draw, tailored, pleated, cafe, three tier curtains. Types of Draperies – swags. Accessories- rods hook, rails, racks, curtain tape pins.						
Unit:4		Soft furnishings for living rooms				
Soft furnishings for living and bed linen. Introduction to living and bedroom linens, types-sofa, sofa covers, wall hangings, cushion, cushion covers, upholsteries, bolster and bolster covers, bed sheets, covers, blankets, blanket covers, comfort and comfort covers, bed spreads, mattress and mattress covers, pillow and pillow covers, pads, uses and care.						
Unit:5		Soft furnishing for kitchen and dining				
Soft furnishings for kitchen and dining, types of kitchen linens – kitchen towel, aprons, dish cloth, fridge, grinder and mixie covers, mittens, fridge holders –their uses and care. Types of dining- table mat, dish/pot holders, cutlery holder, fruit baskets, hand towels-uses and care. Bathroom linens – types, uses and care.						
Text Book(s)						
1	Home Comforts-The Arts and Science of Keeping Home, Cheryl Mendelson, Scriber, New York, 2005					
2	Cushions and Pillows- Professional Skills – Made Easy, Hamlyn Octopus, Octopus Publishing Group, New York, 2001					
3	The Ultimate Sewing Book 200 Sewing Ideas For You and Your Home, Magi Mc McCormick Gordon, Collins and Brown, London, 2002					
4	Design and make curtains, Heather Luke, New Holland publishers, London,1999					
5	Cornucopia of Cushions, Susie Johns, Apple Press, London, 1997					
6	Art in Everyday Life, Harriet Goldstein and Vetta Goldstien, The Macmillian Company, 2004					
7	Performance of Home Textiles, Subrata Das, Woodhead Publishing India Pvt. Limited, 2010					



8	Home Furnishing, V. Ramesh Babu and S. Sundaresan, Woodhead Publishing India Pvt. Limited, 2018
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.homestratosphere.com/types-curtains/">https://www.homestratosphere.com/types-curtains/</a>
2	<a href="https://bettersleep.org/mattress-education/mattress-accessories/pillow-types/">https://bettersleep.org/mattress-education/mattress-accessories/pillow-types/</a>
3	<a href="https://textilecourse.blogspot.com/2018/06/types-classification-home-textiles.html">https://textilecourse.blogspot.com/2018/06/types-classification-home-textiles.html</a>
4	<a href="https://www.fibre2fashion.com/industry-article/1769/home-textiles-a-review">https://www.fibre2fashion.com/industry-article/1769/home-textiles-a-review</a>
5	<a href="http://www.india-crafts.com/textile/home-textile.html">http://www.india-crafts.com/textile/home-textile.html</a>



Course code		EMBROIDERY & ACCESSORIES MAKING PRACTICAL	L	T	P	C
SBEC-I				-	5	3
Basic knowledge about knit fabric				Syllabus		2021 Onwards
<b>Course Objectives:</b>						
1. To impart knowledge to the students about the hand and machine embroidery. 2. To learn the various types of stitches. 3. To provide opportunity for skill development in designing accessories. 4. To impart knowledge on fashion accessories & creativity.						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Produce the hand and machine embroidery samples					P4
2	Prepare decorative samples using beads or mirrors or sequins or etc.,					P5
3	Develop complex fashion accessories by learning to design different accessories manually					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>A. Prepare samples for the following</b>						
1. Hand embroidery – 20 stitches -10 samples						
2. Machine embroidery -7stitches -3 samples.						
3. Applique ( machine / hand )- 3 types						
4. Smocking – 4 types						
5. Bead Work -1 sample						
6. Sequins work -1 sample						
7. Zardosi work -1 sample						
8. Tassels and fringes -2-3samples.						
9. Mirror work –Shapes (Round, square, diamond) - 3 samples						
10. Fixing the stones-1 sample.						
<b>B. Traditional surface ornamentation practices with two to four variations in the following,</b>						
1. Kantha						
2. Chikan						
3. Kasuti						
4. Zardosi						
5. Kutch work						
6. Mirror work						
7. Aari work						
8. Phulkari work .						
<b>C. Crocht</b>						
<b>D. In embroidery practical add</b>						
<b>E. Hand bag - Any 3 types</b>						
<b>F. Hat - Any 2 types</b>						
<b>G. Bow - Decorative bow &amp; formal bow</b>						
<b>H. Purse &amp; pouches - any 2 types</b>						
<b>Text Book(s)</b>						
1	Scientific garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune411011					
2	Shailaja D. Naik, Traditional embroideries of India, APH Publishing (1996 )					
3	Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college32					
4	Libby Moore Thread folk, a Modern Maker's book of Embroidery, Project & Artist Collaboration, Paige Tata & Co.					
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>						
1	<a href="https://sueguide.csom/smocking/">https://sueguide.csom/smocking/</a>					
2	<a href="https://www.youtube.com/watch?v=nJz9c8gEvFg">https://www.youtube.com/watch?v=nJz9c8gEvFg</a>					

Course code		FUNDAMENTALS OF DESIGNING	L	T	P	C
NMEC-II			2	-	-	2
Have basic knowledge in designing			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Impart knowledge on design concepts in the field of fashion						
2. Familiarize with the fashion cycles, consumers and theories						
3. Design suitable garments for unusual figure types						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Infer about design and its types					K2
2	Interpret the principles of design and its applications					K3
3	Explain color theory and color schemes.					K2
4	Generalize the designing concepts for unusual figures.					K2
5	Justify wardrobe planning and list out the factors for fabric selection					K2
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit:1</b>		<b>Design and its types</b>				
Types of Design-Structural and Decorative design, Requirements Of Structural And Decorative Design, Elements of Design-Line, Size, Shape, Color and Texture.						
<b>Unit:2</b>		<b>Principles of design</b>				
Principles of Design - Balance, Emphasis, Proportion, Rhythm, Harmony and its types. Application of principles of design in dress design.						
<b>Unit:3</b>		<b>Color theory</b>				
Color- Definition, Color theory - Prang color system, Dimension of color- Hue, Value and Intensity. Color schemes in Prang color System.						
<b>Unit:4</b>		<b>Designing dresses for unusual figures</b>				
Figure Irregularities – Stout figure, Thin figure, Broad shoulders, Narrow Shoulders, Faces–Round, Large, and Small face.						
<b>Unit:5</b>		<b>Wardrobe Planning</b>				
Wardrobe Planning – Factors to be considered while selecting clothes for different age group – Men, Women and Children.						
<b>Text Book(s)</b>						
1	Fashion Sketch Book – Bina Abbing, Fair Child Publications, New York Wardrobe,1988.					
2	Fashion from Concept to Consumer – Frings Gini Stephens, Pearson Education, US, 1998.					
3	Inside the Fashion Business – Kitty G. Dickerson, Pearson Education,US, 2007.					
<b>Related Online Contents</b>						
1	<a href="https://www.apparesearch.com/terms/index.html">https://www.apparesearch.com/terms/index.html</a>					
2	<a href="https://www.instyle.com/fashion">https://www.instyle.com/fashion</a>					
3	<a href="https://prezi.com/1tlwgnhviqs-/fashion-elements-and-principles-of-design/">https://prezi.com/1tlwgnhviqs-/fashion-elements-and-principles-of-design/</a>					



# FIFTH SEMESTER



Wisdom Maketh World

Course code		APPAREL COSTING & MERCHANDISING	L	T	P	C
Core VII			5	-	-	5
Basic knowledge in garment production processes			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Impart learning about principles of costing and budgeting						
2. Impart learning about costing procedure for various garment styles						
3. Impart learning about costing procedure for export and domestic products						
4. Instruct about roles & responsibilities of merchandiser						
5. Describe about planning & programming in execution of an order						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Infer about the elements of cost in pricing apparels					K2
2	Generalize the process involved in budgeting.					K2
3	Estimate the fabric cost in apparel production					K4
4	Summarize order sheet and maintain record in garment production unit.					K2
5	Prioritize the promotional aids for retail and whole sale apparel marketing					K4
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit:1</b>		<b>Elements of Cost</b>				
Principles of costing - requirements of good costing system - cost unit - types of costs - Elements of cost - direct material cost - direct expenses - direct wages - indirect materials – indirect expenses - indirect labour-overheads—prime cost-work cost-cost of production – total cost. INCO terms & its relationship with costing						
<b>Unit:2</b>		<b>Budgeting</b>				
The budgeting process: Budgeting principles for the apparel industry- Fixed vs. variable budget - Master budget-laminations of budgets- any justification effort -Planned Vs Actual Cost.						
<b>Unit:3</b>		<b>Fabric Cost Estimation</b>				
Cost estimation of yarn, knitted fabric, dyeing, printing & finishing. Woven Fabric Costing: fabric types, yarn consumption, weaving price Cost estimation for cutting, stitching, checking, packing, forwarding, shipping, and insurance.						
<b>Unit:4</b>		<b>Order Sheet &amp; Documentation</b>				
Order sheet and its contents – Packing list and its contents – Document formats: order sheet, packing list, invoice, inspection and testing reports etc., - Assortment and its types. Documents recording and maintenance – Claims and reasons for claims - Factory audits – Buyer’s code of conducts.						
<b>Unit:5</b>		<b>Product Promotion</b>				
Advertising- scope, importance, types, merits & demerits; sales promotion, personal selling. Retail management. Export associations – Apparel Export Promotion Council – Journals and magazines related to apparel and textiles –Trade shows and Fairs – Participation in trade shows – Advantages of trade shows and fairs - Apparel & Textile Trade shows and fairs in India.						

**Text Book(s)**



1	Apparel Costing, M. Krishnakumar, Abhishek Publications 2015
2	Apparel Costing, Andrea Kennedy, Andrea Reyes, Francesco Venezia, Bloomsbury Visual Arts, 2020
3	Apparel Costing, A functional Approach, Krishnakumar, M, Abishek Publications, Chandigarh, 2012
<b>Related websites</b>	
1	<a href="https://www.toppr.com/guides/fundamentals-of-accounting/fundamentals-of-cost-accounting/elements-of-cost/">https://www.toppr.com/guides/fundamentals-of-accounting/fundamentals-of-cost-accounting/elements-of-cost/</a>
2	<a href="https://corporatefinanceinstitute.com/resources/knowledge/finance/budgeting/">https://corporatefinanceinstitute.com/resources/knowledge/finance/budgeting/</a>
3	<a href="https://efinancemanagement.com/budgeting">https://efinancemanagement.com/budgeting</a>
4	<a href="https://theinvestorsbook.com/pricing-methods.html">https://theinvestorsbook.com/pricing-methods.html</a>
5	<a href="https://www.yourarticlelibrary.com/marketing/pricing/pricing-objectives-top-5-objectives-of-pricing-explained/48639">https://www.yourarticlelibrary.com/marketing/pricing/pricing-objectives-top-5-objectives-of-pricing-explained/48639</a>



Course code		TEXTILE FINISHING	L	T	P	C
Core VIII			5	-	-	5
Basic knowledge in garment production processes			Syllabus		2021 Onwards	
Course Objectives:						
1. To impart knowledge & understanding of chemistry, mechanism & application process of various textile finishes.						
2. It aims to enhance the awareness of future trends in textile finishing.						
3. To impart the knowledge about finishing methods of fabric based on their function.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Distinguish the method & application of finishes on different textile substrates.					K2
2	Generalize the process sequence of mechanical finishes on textile materials.					K2
3	Interpret the functional finishes on textile materials					K3
4	Infer about the advanced finishes carried out on textiles					K3
5	Discover the special finishes on textile materials.					K4
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1 Finishing						
Finishing - Introduction – Objects of finishing, Importance of finishing, Classification of finishes, Advantages of finishing.						
Unit:2 Mechanical Finishing						
Mechanical Finishes- Beetling, Shearing, Calendaring, Tentoring, Moiering, Embossing, Glazing, Napping, Chemical Weighting of Silk, Sizing, Sanforizing, Schreiner, Wrinkle free finish.						
Unit:3 Functional Finishing						
Functional Finish - Resin finish, Water Proof finish, Water Repellent finish, Antimicrobial finish, Flame Retardant finish, Soil Release finish - Process and Recipe, Types and Method of Fusing, Welding and Adhesives, Molding.						
Unit:4 Advanced Finishes						
Advanced Functional Finish - Stiff finish - Process and Recipe, Softening - Silicone finish, Denim finish, Stone Wash finish, Anti - Pilling finish, Anti Mildew finish.						
Unit:5 Special finishes						
Special Finishes On Garments–Finishing of Woven/Knitted garments–Stoneless, Stone Wash effects– Mud wash, Ion wash, Chalk wash, Water resistant Breathable finish, Bio polishing, Leathery Finish, Protective Finishes–Deodorizing, Cool Finish and Thermo stat finishes.						
Text Book(s)						
1	Shenai and Saraf. 1995. Technology of Textile Finishing. Sevak publications.					
2	Nallangilli and Jayaprakasam. 2005. Textile Finishing. S.S.M Institute of Textile Technology.					
3	Prayag. 1996. Technology of finishing. Shree J. Printers, Pune					
Related websites						
1	<a href="https://nptl.ac.in/courses/116/102/116102054/">https://nptl.ac.in/courses/116/102/116102054/</a>					
2	<a href="https://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_ug.php/130">https://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_ug.php/130</a>					

Course code		FASHION BUSINESS COMMUNICATION	L	T	P	C
Core-IX			5	-	-	5
Knowledge about fashion			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Gain a better understanding of a fashion designer at the national and international level						
2. Impart knowledge on new product development, sales promotion, retailing and pricing						
3. Move towards a sustainable fashion						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Describe the factors influencing fashion changes and World fashion centers.					K2
2	Analyze the contributions of the fashion designers nationally and internationally					K4
3	Generalize the steps involved in new product development and sales promotion					K2
4	Analyze the scope and functions of retailing and pricing					K4
5	Evaluate the environmental pollution created by fashion products and move towards sustainable fashion					K4
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit:1</b>		<b>World of Fashion- An Overview</b>				
Factors influencing fashion changes – Accelerating and Decelerating factors						
Understanding Fashion designer – types – classicist, idealist, influenced, realist, thinking poet. Minimalists, Village India, Studio line.						
World Fashion Centers – Milan, Paris, London and New York						
<b>Unit:2</b>		<b>Legendary Fashion Designers</b>				
Study of International Fashion Designers of the World – Yves Saint Laurent, Valentino, Pierre Cardin, Ralph Lauren, Karl Lager field, Donna Karen, Giorgio Armani, Coco Chanel, Calvin Klien, Christian Dior.						
An overview of Indian Fashion Designers – Manish Malhotra, Manish Arora, Ritu Beri, Tarun Tahiliani, Rohit Bal, Wendell Rodricks, JJ Valaya.						
<b>Unit:3</b>		<b>Fashion Products and Promotion</b>				
The fashion industry and new product development; product mix and range planning. Fashion and Seasons.						
Fashion Promotion – Fashion Communication; Fashion Advertising and Publicity; Personal Selling – importance and steps involved; Fashion Shows – types and steps involved in organizing a show; Sales promotion methods /strategies.						
<b>Unit:4</b>		<b>Fashion Retailing</b>				
Fashion Retailing - Scope and functions, Types of Stores, Challenges for fashion retail in India, E- retailing – growth and development, Major players of fashion goods online. Pricing policies and strategies for apparel products, Functions and factors Influencing pricing, pricing strategies for new products, methods of setting prices						
<b>Unit:5</b>		<b>Sustainable Fashion</b>				
Sustainable Fashion – meaning and significance; Environmental concerns related to fashion; Linear fashion and circular fashion; 4R's in sustainability – Repair, recycle, reuse and reduce. Moving towards sustainable fashion - Eco fashion, Slow fashion; Environmental impact of fast fashion.						

<b>Text Book(s)</b>	
1	Drake et-al, Retail Fashion: Promotion and Advertising, Macmillan Publication Company. New York, 1992.
2	Gini Stephens Frings, Fashion – From Concept to Consumer, 6th edition, Prentice Hall, 1999.
3	Leslie Davis Burns et-al, The Business of Fashion: Designing, Manufacturing and Marketing, 4th Edition, Bloomsbury Academic publisher, 2011
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://247wallst.com/special-report/2018/10/01/the-30-most-influential-fashion-designers-of-all-time/8/">https://247wallst.com/special-report/2018/10/01/the-30-most-influential-fashion-designers-of-all-time/8/</a>
2	<a href="https://www.reviewsexp.com/blog/top-fashion-designers/">https://www.reviewsexp.com/blog/top-fashion-designers/</a>
3	<a href="https://en.wikipedia.org/wiki/Fashion_capital">https://en.wikipedia.org/wiki/Fashion_capital</a>
4	<a href="https://www.fibre2fashion.com/">https://www.fibre2fashion.com/</a>
5	<a href="http://www.technopak.com/Files/fashion-retail-scenario-in-india.pdf">http://www.technopak.com/Files/fashion-retail-scenario-in-india.pdf</a>
6	<a href="https://en.wikipedia.org/wiki/Sustainable_fashion">https://en.wikipedia.org/wiki/Sustainable_fashion</a>
7	<a href="https://fashionunited.uk/news/fashion/re-defining-sustainability-repair-recycle-reuse-and-reduce/2016052520528">https://fashionunited.uk/news/fashion/re-defining-sustainability-repair-recycle-reuse-and-reduce/2016052520528</a>
8	<a href="https://get-green-now.com/environmental-impact-fast-fashion/">https://get-green-now.com/environmental-impact-fast-fashion/</a>



Course code		<b>COMPUTER APPLICATION IN GARMENT DESIGNING PRACTICAL</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Core- Practical VIII</b>				-	<b>5</b>	<b>3</b>
<b>Knowledge and skills in manual pattern</b>			<b>Syllabus</b>		<b>2021 Onwards</b>	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Acquire skills in developing patterns through computer software.						
2. To understand the basics of CAD software						
3. Drafting, Grading and Marker planning of garment patterns using new advance software.						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Draft the pattern for various kid's, women's and men's wear					P3
2	Grade the pattern blocks into various sizes.					P4
3	Create marker planning for the pattern for cutting with higher efficiency					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>Unit: 1</b>		<b>Children's wear</b>				
Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments						
1. Yoke frock						
2. Baba suit						
3. Summer frock						
4. Skirt and tops						
<b>Unit: 2</b>		<b>Women's wear</b>				
Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments						
5. Salwar						
6. Kameez						
7. Tops						
8. Nighty						
<b>Unit: 3</b>		<b>Men's wear</b>				
Draft and grade patterns for the following garments. Create marker plans and conduct fit analysis for the following garments						
9. Full sleeve shirt						
10. T-Shirt						
11. BermudasPleated trouser						



<b>Contemporary Issues</b>	
Expert lectures, online seminars – webinars	
<b>Text Books</b>	
1	Pattern Cutting For Clothing Using Cad: How To Use Lectra Modaris Pattern Cutting Software - Stott M, Woodhead Publishing Ltd, 2012
2	Pattern Cutting And Making Up Revised Edition - Shoben M M , CBS Publishers and Distributors, 2000
3	Computer Aided Design & Manufacturing (Test CAD Programs Inside), Sadhu Singh, Khanna Publications, 1998.
<b>Related Online Content [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://medcraveonline.com/JTEFT/various-approaches-in-pattern-making-for-garment-sector.html">https://medcraveonline.com/JTEFT/various-approaches-in-pattern-making-for-garment-sector.html</a>
2	<a href="https://www.youtube.com/watch?v=jTWtQNTJt_A">https://www.youtube.com/watch?v=jTWtQNTJt_A</a>
3	<a href="https://www.youtube.com/watch?v=iX7O4X7O4fNQijA">https://www.youtube.com/watch?v=iX7O4X7O4fNQijA</a>





Course code		INTERNSHIP TRAINING (Viva-voce)	L	T	P	C
Internship			-	-	-	-
	Gain Practical insights of the industry / company	Syllabus	2021 Onwards			
<b>Course Objectives:</b>						
The main objectives of this course are to:						
1. Expose the students to the work environment						
2. Familiarize and adapt to the workplace						
3. Understand the methods, techniques and practices followed in the place of training						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
Generalize working structure of the industry/ company						P3
Analyze the methods adopted in the training place						P4
Recognize the challenges in the training place						P2
Discover the nuances of the workplace and appreciate it						P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
<b>Details of the Training</b>						
The student should undergo <b>15 Days Internship training</b> in a Textile Processing Unit/ Designer House / Buying House/ Garment Unit / Retail house after IV semester theory exam / before the start of Fifth Semester (Grading system-Highly Commended/Commended)						
<b>Purpose of the Internship Training</b>						
The training bridges the gap between the theoretical knowledge gained in the college and the practical application of the same in the industry / company / stores						
The student will have a better exposure about the workplace and its nuances						
<b>Process to be Followed</b>						
Students can identify their area of interest. Industry / companies have to be identified and a profile of the company has to be analyzed at least a month earlier. Contacts can be established by the guides allotted to the student. Prior permission has to be obtained from the place of training.						
After confirmation, the student will undergo training for a period of 15 working days.						
<b>Instructions to the Students</b>						
The students should abide by the rules and regulations of the concern and get the maximum benefit from the training. The students should maintain a daily logbook where the student should record his details of the training.						
A copy of the record has to be sent to the supervisor allotted to the student. The logbook must be signed (with seal) by the staff of the company. Based on the study done, the student will submit a report to the guide within a weeks' time along with the logbook. In case of any problems, the student should reach out to the supervisor immediately						
<b>Instructions to the Supervisor</b>						
The supervisor should establish contacts with the place of training. A routine follow up has to be done with the student once in two or three days. Problems, if any faced by the student should be sorted out immediately.						

**Training Report and Presentation**

Training Report (30 – 50 pages) should be prepared by the student and submitted in a month's time. At the end of the semester student should present the report with a power point presentation

**Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]**

1	<a href="https://www.wikihow.com/Write-a-Report-After-an-Internship">https://www.wikihow.com/Write-a-Report-After-an-Internship</a>
2	<a href="http://mfe-iseah-kef.blogspot.com/2013/11/internship-daily-journal.html">http://mfe-iseah-kef.blogspot.com/2013/11/internship-daily-journal.html</a>
3	<a href="https://www.academia.edu/25257761/Student_Internship_Logbook">https://www.academia.edu/25257761/Student_Internship_Logbook</a>
4	<a href="https://www.indeed.com/career-advice/career-development/how-to-write-an-internship-report">https://www.indeed.com/career-advice/career-development/how-to-write-an-internship-report</a>
5	<a href="https://valenciacollege.edu/students/internship/documents/ActivityLog.pdf">https://valenciacollege.edu/students/internship/documents/ActivityLog.pdf</a>
6	<a href="https://www.template.net/business/log/internship-time-log/">https://www.template.net/business/log/internship-time-log/</a>



Course code		MENS APPAREL PRACTICAL	L	T	P	C
Core Practical-IX			-	-	5	3
Basic Knowledge about Men's apparel designing				Syllabus		2021 Onwards
Course Objectives:						
<div>1. To impart the practical knowledge in pattern drafting &amp; garment construction skill in men's wear for the Students.</div> <div>2. To develop creative skills in designing &amp; constructing men's wear for different age group</div> <div>3. List the measurements required and materials suitable.</div>						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Design and generalize the measurements for the various men's garments.					P3
2	Prepare patterns and calculate material requirement for the designed men's wear.					P3
3	Construct the designed men's garment and calibrate the cost of the garment.					P5
K1 - P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.						
<div>1. S.B.Vest – with/ without collar, button attached, sleeveless</div> <div>2. Slack shirt – full open, shirt collar, patch pocket,</div> <div>3. Nehru kurtha –stand collar, side pocket, half open</div> <div>4. Pyjama- Elastic /Tape attached waist.</div> <div>5. Pleated trousers – pleats in front, Darts at back, side pocket, fly with button/zip.</div> <div>6. T-Shirt – open collar, zip attached</div> <div>7. Bermudas –patch pocket</div>						
Text Book(s)						
1	Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai(1986)					
2	Zarapker System of Cutting- Zarapker. K. R, Navneet Publicationsltd.					
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]						
1	<a href="https://shoeguide.com/">https://shoeguide.com/</a>					
2	<a href="https://www.patternsonline.com-default.aspx">https://www.patternsonline.com-default.aspx</a>					



Course Code		ENTREPRENEURSHIP DEVELOPMENT	L	T	P	C
MBEC-I			5	-	-	5
Basic knowledge about apparel business Opportunities			Syllabus		2021 Onwards	
Course Objectives:						
The main objectives of this course are to:						
1. Familiar the students with challenges of starting new ventures						
2. Enable them to investigate, understand and internalize the process of setting up a new business.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
Outline the concept of entrepreneurship and traits of entrepreneur					K2	
Identify a project and formulate a project report.					K4	
Appraise the formalities of SSI's Registration for an enterprise					K4	
Identify the Sources of Finance and Institutional Assistance for small scale industries.					K4	
Infer about entrepreneur, Incubation centers and start up in India					K4	
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create						
Unit:1	Introduction to Entrepreneurship					
Entrepreneurship: Concept and Definitions; Entrepreneurship and Economic Development; Classification and Types of Entrepreneurs; Entrepreneurial Competencies; Factor Affecting Entrepreneurial Growth – Economic, Non-Economic Factors; EDP Programmes; Entrepreneurial Training; Entrepreneur; Manager Vs. Entrepreneur.						
Unit:2	Starting the venture					
Project Identification – Project formulation – Project design - preparing project report - Project Planning and Scheduling using Networking Techniques of PERT / CPM; Methods of Project Appraisal.						
Unit:3	SSI and Registration					
Small Enterprises and Enterprise Launching procedures and Formalities Role of SSI in Economic Development of India; SSI; Registration; NOC from Pollution Board; project report presentation guidelines						
Unit:4	Sources of Finance and Institutional Assistance					
Role of Support Institutions and Management of Small Business: Director of Industries; DIC; SIDO; SIDBI; Small Industries Development Corporation (SIDC); SISI; NSIC; NISIET, NIESBUD; TANSIDCO; TIIC; State Financial Corporation; KVIC						
Unit:5	Financial incentives for SSI					
Financial incentives and subsidies for SSI's, and Tax concessions; – seed capital assistance –Role of entrepreneur in export promotion and import substitution – Social Entrepreneur, Incubation centre, Startup India						

<b>Text Book(s)</b>	
1	Entrepreneurial Development, Dr. C.B. Gupta, Sultan Chand & Sons, New Delhi, 2009
2	Entrepreneurial Development, Dr.S. S Khanka, Sultan Chand & Sons, New Delhi, 2009.
3	Entrepreneurship Development and Small Business Enterprises, Charantimath, Poornima, Pearson Education, New Delhi, 2006
4	Entrepreneurship New Venture Creation, David H. Holt, Prentice Hall of India Private Limited, New Delhi, 2005
<b>Related Websites</b>	
1	<a href="https://www.researchgate.net/publication/259843889">https://www.researchgate.net/publication/259843889</a>
2	<a href="https://ncert.nic.in/textbook/pdf/kebs109.pdf">https://ncert.nic.in/textbook/pdf/kebs109.pdf</a>





# SIXTH SEMESTER





Course Code		CLOTHING CARE	L	T	P	C
Core-X			5		-	5
Basic Knowledge about garment and fabric care			Syllabus		2021 Onwards	
Course Objectives:						
<div><div>1. This course facilitates an understanding, care and maintenance of textiles and orients the learners in the field of clothing industry.</div><div>2. The learners are expected to know the laundry soaps, Laundry equipment and dry cleaning in textile industry.</div><div>3. Impart the knowledge of machines and equipment used in washing, storing, and ironing process.</div></div>						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Identify the suitable methods of washing, drying, ironing and storing					K4
2	Evaluate the methods and equipment to be used for the better life of clothes					K4
3	Appraise the stiffening agents used in fabric washing.					K4
4	Recognize the principles of washing and its facts.					K4
5	Analyze the special types of laundry for special fabrics and care label symbols.					K4
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1		Clothing Care Essentials				
Water- hard and soft water, Determination of water hardness methods of softening water. Zeolite or Base exchange method. Laundry CI soaps – Manufacture of soap and methods, composition of soap, types of Soap, soap less detergents, chemical action, detergent manufacture, advantages of detergents. Difference between soap and detergents.						
Unit:2		Laundry and Drying Equipment				
Laundry equipment and reagents: Study of laundry equipment and laundry reagents - soaps - detergents - cleaning action of soaps, indigenous cleaning agents - rita nut - shikakai - green gram - bran solution – study of modern and industrial cleaning agents						
Unit:3		Finishes and stiffening agents				
Stiffening Agents: Study of stiffening agents –purpose of stiffening-classification of stiffening Agents preparation and uses of stiffeners – natural and commercial starches – reparation of starch for use – bleaching agents - bluing and tinting agents and their application–optical whiteners.						
Unit:4		Principles of Washing				
Washing Machine And Care Labels: Study of different types of house hold/industrial washing machine- rotary - swirling - pressure - tumble wash etc; the various systems of care labeling - washing instruction. Bleaching instruction – drying instruction-ironing instruction-dry cleaning instruction. Placement of labels on garments.						
Unit:5		Special Types of Laundry & Care Labels				
Stain Removal: Principles of laundering – stain removal – various solvents for stain removing blood, tea, rust; oil/grease etc. – different methods of washing - application of friction by hand rubbing - scribing - tumble wash. General rules and ways of stain removal.						
Text Book(s)						

1	Dantayagis, -Fundamentals of Textile and Their Care, Oriental Longmans Ltd, New Delhi, 1996
2	Denlkar, -Household Textiles and Laundry Work, Atma Ram and Sons, Delhi, 1993
3	Neomi D'Souza, -Fabric Care, New Age International Publisher, 1998
4	Davis, -Laundry and Clothing Care, Drama Book Publishers, 1995
<b>Related Websites</b>	
1	<a href="https://www.bhg.com/homekeeping/laundry-linens-cloths-how-to-wash-clothes-by-hand/">https://www.bhg.com/homekeeping/laundry-linens-cloths-how-to-wash-clothes-by-hand/</a>
2	<a href="https://textilelearner.blogspot.com/2013/07/textile-finishing-processing.html">https://textilelearner.blogspot.com/2013/07/textile-finishing-processing.html</a>



Course code		APPAREL PRODUCTION MANAGEMENT	L	T	P	C
Core XI			5		-	5
Basic Knowledge in Garment Production Processes			Syllabus		2021-2022 Onwards	
Course Objectives:						
The main objectives of this course are to:						
1. The Students will be able to familiarize with the function of the garment industry, its various process and technical parameters in garment production.						
2. It will enhance awareness of seen product, machinery & equipment and prepare the students for work around the garment industry.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Understand the concept of plant location and layout					K2
2	Analyze the work study techniques					K4
3	Apply the best techniques to improve productivity with quality production					K3
4	Understand the functions of line balancing techniques					K2
5	Evaluate production planning and control techniques					K5
K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create						
Unit:1	Plant Location and Layout					
Plant Location and Layout. Production - Definitions - Terminology - Organizing for Production - Function of Production Department - Introduction to Garment Industry Plant Location - Location Economics -Plant Layout – Process Layout -- Product Layout – Combination Layout -Introduction to Balancing Theory – Balance Control.						
Unit:2	Work Study					
Work Study- Concept And Need - Method Study and Work Measurement -Techniques - Process Chart Symbol - Process Flow Chart -Flow Diagrams - String Diagrams - Multiple Activity Chart - Principles of Motion Economy – Simo Chart - Time Study Methods - Standard Time Data - Ergonomics With Special Reference To Garment Industry.						
Unit:3	Production and Productivity					
Production and Productivity- Methods of Production Systems - Job, Mass & Batch - Section Systems, Progressive Bundle System & 'Synchro' System- Conveyor Systems - Unit Production System - Advantages of UPS - Quick Response- Measurement of Productivity -"Men, Machine, Material" - Total Factor Productivity-Criteria for Increasing Productivity in Garment Industry.						
Unit:4	Line Balancing					
Line Balancing - Duties and Responsibilities of Production manager / Supervisor - Effective Line Supervision - Factors of Production -Production Function - Process Flow and Charts for Garment - Scheduling Calculations.						
Unit:5	Production Planning and Control					
Production Planning and Control - Capacity Requirement Planning [CRP] - Material Requirement Planning -Steps in Production Planning - Factors to be consider in Production Planning -Function, Qualitative and Quantitative Analysis of Production – Coordinating Departmental Activities - Practical Difficulties in implantation.						

<b>Text Book(s)</b>	
1	Carr& Latham's Technology of Clothing Manufacture, fourth edition, revised by David.J.Tyler, Blackwell Publishing UK, 2008.
2	Jacob Solinger, Apparel Manufacturers Handbook, New Age International (P) Ltd, 2005.
3	Gerry Cooklin, Introduction to Clothing Manufacture. Wiley Blackwell, 2006.
4	A. J. Chuter, Introduction to Clothing Production Management, Blackwell Scientific Publications.1988.
5	Tripathi, Personal Management and Industrial Relations, Sultan & Chand Sons, 2013
6	O.P. Khanna, Industrial Engineering and Management, Dhanpat Rai Publications, 2018
7	Rama Moorthi, Production and Operations Management, New Age International (P) Ltd, 2005.



Course code		FASHION DRAPING PRACTICAL	L	T	P	C
Core Practical-X			-	-	5	3
Basic knowledge in pattern making, body silhouettes and various fabrics			Syllabus		2021 Onwards	
Course Objectives:						
The main objectives of this course are to:						
1. To understand the basic draping & manipulation techniques.						
2. To design and develop patterns for different garments based on the body measurements.						
3. To interpret and transform their designs on a three-dimensional form using draping method.						
Expected Course Outcomes:						
On the successful completion of the course, student will be able to:						
1	Prepare muslin and formulate the measurements for various garment's draping					P3
2	Produce the pattern blocks in dress form for various garments					P5
3	Create dart or pleat variations in appropriate garment patterns					P5
P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.						
1. Bodice - Front & Back						
2. Skirt - Front & Back and Its Types						
3. Pant - Front & Back						
4. Sleeve - Bell, Raglan, Cape, Puff, Circular, Kimono						
5. Neckline - Boat, Key Hole, Halter, Scooped, Scalloped						
6. Collar - Mandarin, Peter pan, Turtle, Ruffled & Shawl						
7. Cowls						
8. Twist						
9. Surplice						
10. Yoke - Hip Yoke, Midriff & Shirt Yoke						
11. Design and Drape one couture wear for Men & Women						
Text Book(s)						
1	Draping for Fashion Design, 5 <sup>th</sup> Edition, Nurserieslis, Hilde Jaffe and Rose Mary Torre, Pearson Prentice Hall Publications, United States, 2012.					
2	The Art of Fashion Draping, Connie Amadan Crawford, Fair Child Publications, New York, 2005.					
3	Draping for Apparel Design – 3 <sup>rd</sup> Edition, Helen Joseph and Armstrong, India, Bloomsbury Publications India Ltd, 2013.					
4	Cutting and Draping Special Occasion Cloths: Designs for Party wear and Evening wear, Dawn Cloak, London, Batsford, 1998.					
Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]						
1	<a href="https://style2designer.com/apparel/draping-mannequin/what-is-draping-technique-and-its-process/">https://style2designer.com/apparel/draping-mannequin/what-is-draping-technique-and-its-process/</a>					
2	<a href="https://www.aicp.fr/portfolio-items/moulage-technique-du-moulage/?lang=en#:~:text=Draping%2C%20the%20most%20ancient%20of,to%20create%20a%20fabric%20prototype">https://www.aicp.fr/portfolio-items/moulage-technique-du-moulage/?lang=en#:~:text=Draping%2C%20the%20most%20ancient%20of,to%20create%20a%20fabric%20prototype</a>					



Course code		INTERNATIONAL TRADE AND DOCUMENTATION	L	T	P	C
MBEC II			3	2		4
Basic Knowledge in International trade			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
To study the Trade procedures and documentation formalities are a critical part of International Business Management. This subject aims at imparting knowledge of trade procedures and documentation formalities.						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Outline export promotion council procedures for firm establishment.					K2
2	Infer about the implications of foreign trade policy and its documentations.					K2
3	Generalize the import trade procedures and documentation.					K2
4	Summarize the procedure and formalities of shipment and customs.					K2
5	Interpret the payment procedures and delivery formalities.					K2
<b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create						
<b>Unit: 1</b>	<b>Firm Establishment</b>					
Firm establishment: introduction – export promotion councils and their role – registration Formalities - RCMC –IE code – RBI code – garment classification and categories for various countries – quota – quota distribution methods – quota transfer.						
<b>Unit: 2</b>	<b>Foreign Trade Documents</b>					
Foreign trade documents: need, rationale and types of documents relating to goods – invoice – packing note and list – certificate of origin – certificate relating to shipments – mate receipt – shipping bill – cart ticket – certificate of measurement – bill of lading – air way bill – documents relating to payment – letter of credit – types of L/C - bill of exchange – letter of hypothecation – bank certificate for payment – document relating to inspection – certificate of inspection – GP and other forms.						
<b>Unit: 3</b>	<b>Import Procedure</b>					
Import procedure : import license – procedure for import license – import trade control regulation procedure – special schemes – replenishment license – advance license – split up license – spares for after sales service license – code number – bill of entry						
<b>Unit: 4</b>	<b>Shipment &amp; Customs</b>					
Shipment and customs: Pre-shipment inspection and quality control – foreign exchange formalities – Pre-shipment documents - documentation terms - excise and customs clearance of export cargo – shipment of goods and port procedures – customs clearance of import cargo. Post – Shipment formalities and procedures – claiming duty drawback and other benefits.						
<b>Unit: 5</b>	<b>Payment and Deliveries</b>					
Payment and deliveries: terms of delivery– INCO terms – EXW – FCA – FOB – CFR – CIF – CPT – DAF – DDP – DDU. Terms of payment – open account – cheque – cash payment against documents – bank payment against documents (LC) – security and Cost of various payment terms – Assessing the risk in payment – role of ECGC and standard policy.						
<b>Text Books</b>						
1	International Trade and Documentation, Edward G Hinkelman, Publisher: World Trade Press					



	2001.
2	Streamline Your Export Paper Work, Bose. A., Published by International Trade Form, Oct – Dec 1965.
3	Export and Import Management, Aseem Kumar, Excel Publications, 2007.
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://www.marketresearchreports.com/apparel-retailing">https://www.marketresearchreports.com/apparel-retailing</a>
2	<a href="https://smallbusiness.chron.com/analysis-retail-apparel-industry-70514.htm">https://smallbusiness.chron.com/analysis-retail-apparel-industry-70514.htm</a>
3	<a href="https://www.marketresearch.com/Consumer-Goods-c1596/Consumer-Goods-Retailing-c80/Apparel-Retailing-c1093/">https://www.marketresearch.com/Consumer-Goods-c1596/Consumer-Goods-Retailing-c80/Apparel-Retailing-c1093/</a>



Course code		<b>PORTFOLIO PRESENTATION-VIVA VOCE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>SBEC II</b>			-	-	<b>5</b>	<b>3</b>
<b>Knowledge in creating various garments</b>			<b>Syllabus</b>		<b>2021 Onwards</b>	
<b>Course Objectives:</b>						
The main objectives of this course are to:						
<div><div>1.</div><div>To design and execute an organized collection of creative works</div></div> <div><div>2.</div><div>To make original works of art that demonstrates effective use of design principles, appropriate crafts man ship and technique.</div></div> <div><div>3.</div><div>Design collections by fulfilling the objectives of the client and user requirements.</div></div>						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
1	Select a theme for different garment categories.					P5
2	Create different portfolio boards for selected theme.					P4
3	Construct the garments for all deigned categories.					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
	<b>Portfolio Presentation and Design Collection</b>					
<b>Part A</b>						
Portfolio Presentation - with Customer profile, Inspiration board, Mood Board, Colour board, Flat Sketch board, Illustration board, Swatch board, Trim board, Accessory board- for the following collection						
<div><div>•</div><div>Fashion Show- with a theme – one ramp set</div></div> <div><div>•</div><div>Winter collection - 3garments</div></div> <div><div>•</div><div>Summer Collection -3 garments</div></div>						
<b>Note</b>						
<div><div>1.</div><div>Customer profile: capture photograph of your customer.</div></div> <div><div>2.</div><div>Inspiration board: Image collection from books and magazines by scanning, Photography and drawing, use of objects for mood creation</div></div> <div><div>3.</div><div>Mood board: develop a theme based on group discussion, mind mapping, brain storming.</div></div> <div><div>4.</div><div>Colour board: spotting theme board, mood board and inspiration board arrive the color board.</div></div> <div><div>5.</div><div>Flat sketch board: Develop front, side and back views</div></div>						
<b>Part B</b>						
Construct the garments for all the above categories						
<b>Contemporary Issues</b>						
Expert lectures, online seminars – webinars						

<b>Text Books</b>	
1	Portfolio Presentation for Fashion Designers, Linda Tain, Fairchild Publishers (1998)
2	Fashion Design Drawing and Presentation, Patrick John Ireland, B T Batsford Ltd, 2006
3	Creative Fashion Presentation, Polly Guerin, Fairchild Publishers, 1987
3	New Encyclopedia of Fashion Details, Patrick John Ireland, Publisher: Pavilion Books, 2008
4	Check and Stripe: A Design-Source Book 2, Kyoto Shoin Company Ltd. 1992
<b>Related Online Contents [MOOC, SWAYAM, NPTEL, Websites etc.]</b>	
1	<a href="https://issuu.com/theodoracucu/docs/portfolio_internship_ba">https://issuu.com/theodoracucu/docs/portfolio_internship_ba</a>
2	<a href="https://successfulfashiondesigner.com/fashion-portfolio/fashion-portfolio-checklist/">https://successfulfashiondesigner.com/fashion-portfolio/fashion-portfolio-checklist/</a>



Course code		BEAUTY CARE PRACTICAL	L	T	P	C
SBEC-III			-	-	5	3
Basic Knowledge about Makeup			Syllabus		2021 Onwards	
<b>Course Objectives:</b>						
1. Produce a capable & skillful workforce as required by the prevailing market demands. 2. Equip the trainees with skills & knowledge to ensure adherence to safety measures in saloon. 3. Select, operate and handle equipment according to the professional standards						
<b>Expected Course Outcomes:</b>						
On the successful completion of the course, student will be able to:						
CO1	Create various techniques used in beauty care					P5
CO2	Design traditional and modern style makeup using different equipments.					P5
CO3	Practice beauty techniques and procedures for different occasions.					P5
<b>P1 – Imitation; P2 – Manipulation; P3 – Precision; P4 – Articulation; P5 – Naturalization.</b>						
1. Different types of haircuts, cutting techniques & blow drying of hair. 2. Traditional hair styling techniques- Rolls, Braids, interlocks, Twisting styles. 3. Henna designing, Tattoo designing & saree draping (4styles). 4. Basic Nail art techniques. 5. Facial -Skin analysis, cleaning & facial with different equipments, application of different types of packs & masks according to the skin types. 6. Different types of makeup - Daytime, Evening, Party & Bridal. 7. Pedicure & manicure. 8. Threading & waxing						
<b>Text Books</b>						
1	Complete Beautician Course by Renu Gupta					
2	Be your own Beautician by Parvesh Handa					
3	Advance makeup and hairstyle by Urvashi Dave					
<b>Related Online Contents</b>						
1	<a href="https://bit.ly/2DB2WQM">https://bit.ly/2DB2WQM</a>					
2	<a href="https://youtu.be/sYoz3G2OH5g">https://youtu.be/sYoz3G2OH5g</a>					
3	<a href="https://youtu.be/_o9cpvQPqBY">https://youtu.be/_o9cpvQPqBY</a>					