

**DEPARTMENT OF HOME SCIENCE AND RESEARCH CENTRE
FASHION DESIGNING**

UNIQUE FEATURES OF SYLLABI

- Fashion Design courses offer a wide range of benefits for those interested in pursuing a career in the fashion industry.
- These courses provide students with the skills, knowledge, and experience necessary to succeed in the competitive fashion world.
- Students must experiment with different fabrics, textures, colours, and styles to create unique designs. This creativity is essential for success in the fashion industry.
- These courses provide students with technical skills like pattern drafting, sewing, and garment construction. These skills are crucial for designing and producing high-quality garments. Students learn to work with different fabrics and materials, create custom designs that fit clients' needs
- Industry knowledge such as fashion history, trend forecasting, and marketing. This knowledge is essential for success in the fashion industry, as it allows designers to understand the market and make informed design decisions.
- It provides networking opportunities for students to connect with industry professionals. This networking can lead to internships, job opportunities, and collaborations. These connections are invaluable in the fashion industry, where networking is essential for success.
- Fashion Design courses allow students to build their portfolios, essential for securing a job in the fashion industry. A portfolio showcases a designer's skills and creativity and can make them stand out from other job candidates.

**DEPARTMENT OF HOMESCIENCE AND RESEARCH CENTRE
FASHION DESIGNING
PG and UG SYLLABUS
(With effect from June 2023)**

Vision:

The Department of Home science and Research Centre aims to empower and uplift women through excellence in education, research and Promote Entrepreneurial spirit among youngsters to inculcate innovative and ingenious bent of mind to be job creators and nation builders in the field of Nutrition and Dietetics, Food Processing and Fashion Designing.

Mission:

- The Programme develops the wholesome personality of the students by unifying their knowledge through Home Science discipline
- Rendering the knowledge-based education to Nutrition and Dietetics, Fashion Designing, and Food Processing students through high-quality teaching, training, and research

mentorship and contributing service to professional, governmental and local community organizations

- Transforming academic inputs to social benefits, nurturing the students for holistic development, extending community outreach for social upliftment, facilitating academia/Industrial collaboration

Programme Educational Objectives:

PEO1: To create and strengthen women leaders through disciplinary knowledge, professional skills and ethical sensitivity

PEO2: To transform students as successful entrepreneurs to face the modern challenges

PEO3: To nurture the students to invent, innovate and create solutions for current moral, ecological and economic issues

Programme Outcomes:

On completion of all Under Graduates and Post Graduate degree programmes the student will be enable with

PO1: Disciplinary Knowledge and Critical Thinking: Acquiring the knowledge of different dimensions in the related areas of study and identifying the assumptions that frame our thinking and actions

PO2: Influential and Effective Communication: Ability to share thought ideas and applied skills of communication in its various preparations through LSRW

PO3: Social Interaction and Effective Citizenship: Ability to identify and follow ethical behaviour appearing employment sustainability and adapting truthful action in all aspects of life

PO4: Research Skills and Scientific Reasoning: Ability to plan executes and reports the results of an experiment and to draw conclusions from evidences

PO5: Ethics: Understand the importance of ethical value and its application in professional life

PO6: Information/Digital Literacy: Capability to use ICT in case of need and their ability to access, evaluate and use the relevant information

PO7: Self-Directed and Lifelong Learning: Acquire the ability to engage in independent and lifelong learning in the context of socio-technological changes

M.Sc. FASHION DESIGNING
[Two-Year Regular Programme]
 (For Students Admitted from 2023-2024)

Programme Specific Outcomes:

On completion of the Under Graduate Degree Programme, student will be able to gain

PSO1: Create strong foundation in designing and have the ability to visually represent it by illustrations, photographs, graphics and visual display of merchandise.

PSO2: Apply the different methods of garment construction and create Apparel designing techniques

PSO3: Creating exposure by learning and designing trends through become an energetic entrepreneur to run own business

PSO4: Educate and practiced in all aspects of the designing process. Throughout their experience, students produce original designs and develop collections for their portfolio

PSO5: Apply to consumer design emphasis track as relevant, creative professionals prepared for the future direction and current trends of this exciting field

PSO6: Choosing Fashion designing employment areas are Design studio, Boutique house, Dyeing and Printing factories, Apparel Export houses, Jewelry houses, Fashion trend sector, Merchandising firms, Media, Research and development firms, Retail/stores, Textile processing mill

PSO7: Good job opportunities with government sponsored, TRB-Sewing Special Teacher. Handloom, Silk Board, Khadi, Jute and Craft development organizations.

PREAMBLE

The course M.Sc. Fashion Designing offered from 2023-2024 Academic Year. According to the UGC guidelines introduced all the PG subjects.

The following changes are made in the 2023-24 syllabus and the candidates who will join from 2023 -24 onwards will follow this syllabus.

- ❖ In semester -I – Core I Fundamentals of Apparel Designing (Lab cum Theory) will be separated and changed as Core I - Basic Garment construction (Theory), Core II - Basic Garment construction Practicals
- ❖ In semester -II - Core III Fashion Illustration II Practicals Changed to AECC-II to add Pattern Making and Grading for Core III and Pattern Making Practicals as Core IV.
- ❖ In semester -II Core IV Historic Costume & Traditional Design is Changed to Skill Enhancement Course II and Title to be changed as History of Fashion and Traditional Design
- ❖ In semester –III- Core V Fashion Studies in Unit IV title changed as Figure Variations and Unit V to add the content of Color Psychology.
- ❖ In semester –IV- Core VI Wet Processing – Dyeing [Theory Cum Practicals] will be separated as Core VII- Wet Processing (Theory) and Core VIII- Wet Processing Practicals in semester IV
- ❖ In semester – IV -Skill Enhancement Course IV Clothing Care and Maintenance content to be added as Fabric conditioner in Unit I, Care and Maintenance in Unit III.
- ❖ In semester – V -Core IX Fundamentals of Apparel Designing (Lab cum Theory) will

be separated and changed as Core XI- Fabric Structure and Design (Theory) and Core X Fabric structure and Design Practicals

- ❖ In semester VI – Computer aided Designing Practicals –I to add content for Ai Tools for content creation and Designing
- ❖ In semester VI – Fashion Retailing and Research topic to be revised as Fashion Retailing and Consumer Behavior and to add Consumer Behavior content in Unit IV.

PROGRAMME CODE: PFD
PROGRAMME STRUCTURE

Semester	Subject Code	Course	Subject Title	Hour/Week	Credit	CIA	ESE	Total Marks
I	IMFDC11	Core I	Textile Science	6	5	25	75	100
	IMFDC12	Core II	● Home Textiles	6	5	25	75	100
	IMFDC13P	Core III	Home Textiles Practicals	6	5	25	75	100
	IMFDC14P	Core IV	Fashion Draping and Garment Construction Practicals	6	5	25	75	100
	IMFDE1A/ IMFDE1B	DSE I	a. Protective Clothing b. Sustainability in Textile and Fashion	6	5	25	75	100
	IMFDX1 IMFDX/O	Extra Credit	Clothing Appearance and Fit / * Online Course (Evaluation of Textiles Materials - NPTEL)	-	2	-	100	100
			TOTAL		30	25+2	200	300+ 100
II	IMFDC21	Core V	Textile Testing and Quality control	6	5	25	75	100
	IMFDC22P	Core VI	Textile Testing Practical	6	5	25	75	100
	IMFDC23P	Core VII	Advanced Illustration Design Art and Painting Practicals	6	5	25	75	100
	IMFDC24P	Core VIII	CAD in Textile and Fashion Practicals	6	5	25	75	100
	IMFDE2A/ IMFDE2B	DSE II	a. Export Trade and Documentation b. Visual Merchandising	6	5	25	75	100
	IMFDX2PW IMFDX2O	Extra Credit	Scientific Writing for Project / *Online Course (Textiles and Quality Analysis - Swayam)	-	2	-	100	100

			TOTAL	30	25+2	125	375+ 100	500+ 100
III	IMFDC31	Core IX	Knitting Technology	6	5	25	75	100
	IMFDC32	Core X	Research Methodology and Statistics	6	5	25	75	100
	IMFDC33P	Core XI	Computer Application in Pattern Making and Grading Practicals	6	5	25	75	100
	IMFDC34P	Core XII	#Retail Store Outlet/ Boutique Management Internship	6	5	25	75	100
	IMFDE3A/ IMFDE3B	DSE III	a. Technical Textile b. Dyeing and Printing Technology	6	5	25	75	100
	IMESX3/ IMFDX3O	Extra Credit	Employability Skills / *Online Course (Academic and Research Report Writing- NPTEL)	-	2	100	-	100
				TOTAL	30	25+2	125+ 100	375
IV	IMFDC41	Core XIII	• Non-woven and Nanotechnologies	6	5	25	75	100
	IMFDC42P	Core XIV	Advanced Garment Construction Practicals	6	5	25	75	100
	IMFDC43PW	Core XV	Dissertation	16	5	100	100	200
	IMFDX4/ IMFDX4O	Extra Credit	Eco Textiles / *Online Course (Testing of Functional and Technical Textiles -NPTEL)		2	-	100	100
			Library	2				
			TOTAL	30	15 + 2	150	250+	400+
			GRAND TOTAL	120	90+ 8	525+ 100	1375 + 300	1900+ 400

DSE –Discipline Specific Elective

*For online certification credit alone will be assigned on submission of certificate obtained through appearing for online examination from Swayam, Spoken Tutorial, EDX, NPTEL etc.

Core I - Textile Science
(For Students Admitted from 2023-24)

Semester: I
Subject Code: IMFDC11

Hours/week:6
Credit: 5

Course Objectives:

1. To gain the knowledge about recent fibers and its manufacturing process.
2. To enable students to study the essential and desirable properties of textile fibre

Unit I (16 Hours)

Fiber Introduction: classification, properties, merits and demerits of natural fibers and manmade fibers. Natural Fibers – Vegetable fibers - Morphological structure - Production, types, physical & chemical properties of Cotton, Silk and Wool.

Unit II (20 Hours)

Regenerated and Cellulose Fibers: Rayon, Modal, Polynosic, Cellulose acetate, Triacetate, Lyocell, Production and Properties. Regenerated cellulose fibres, bamboo, Modal, Tencel, Polynosic, Super Yarn, Triacetate, production and properties, Regenerated protein fibres, manufacture of soy fibres, spider silk fibres, sugarcane fibres, general properties and uses.

Unit III (18 Hours)

Synthetic Fibers: High Tenacity Nylon, High tenacity polyester, poly – acrylic fiber, Physical structure – physical and chemical properties and applications. Specialty fibers – Electrometric fibers – Spandex fiber, properties and uses.

Unit IV (20 Hours)

Yarn Manufacturing: Spinning – Definition, types of spinning – dry, wet and melt spinning. Spinning Process, Open and spun and TFO, Merits and Demerits of Yarn, comparison between ring spun and open end spun yarns. Twist spinning, (Self Twist Spinning), False twist spinning (Air Jet and Friction Spinning) Compact spinning.

Unit V (16 Hours)

Texturization: Definition –process and methods of Texturization – Advantages of textured yarn -Manufacturing of sewing threads - Brief of fancy yarns – Slub yarns – Crimp yarns – Novelty yarns – Boucle yarns.

Course Outcomes:

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

- CO 1:** Identify the recent textile fibres and their process
- CO 2:** Gain knowledge on manufacturing process of yarns
- CO 3:** Differentiate the production process and properties of natural and man-made fibers
- CO 4:** Discuss the latest developments in high performance fibers
- CO 5:** Know the yarn manufacturing process and various fabric formation

Text Books:

1. Javed N. Sheikh, Mohd Shabbir, Shakeel Ahmed, *Frontiers of Textile Materials*, wiley Publisher,2020
2. Seema Sekhri, *Textbook of Fabric Science*, Prentice Hall India Pvt., Limited,2016

References Books:

1. Md Mizanur Rahman, Mohammad Mashud, Md. Mostafizur Rahman, Fibre to Apparel, Springer Nature Singapore, 2023
2. Asis Patnaik, Sweta Patnaik, *Fibres to Smart Textiles*, CRC Press, 2019
3. Ibrahim H. Mondal, *Fundamentals of Natural Fibres and Textiles*, Elsevier Science, 2021

Journals:

1. Journal of Textile Research
2. International Journal of Textile Science Research
3. Journal of Natural Fibers

E-Resources:

1. <https://textilevaluechain.in/in-depth-analysis/articles/textile-articles/introduction-to-textiles/>
2. <https://www.vedantu.com/biology/fibre-to-fabric>
3. <https://www.vedantu.com/chemistry/types-of-synthetic-fibres>
4. <https://textilelearner.net/concept-of-yarn-manufacturing-process/>
5. <https://www.textilesphere.com/2020/05/yarn-texturing.html>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	9	1	9	1	9	9	41
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	3	9	9	9	45
CO4	3	3	1	3	1	9	9	29
CO5	9	9	9	9	3	9	9	57
Total	27	27	23	33	17	45	45	217

Low-1 Medium-3 High-9

Core II - Home Textiles

(For Students Admitted from 2023-24)

Semester: I

Subject Code: IMFDC12

Hours/week:6

Credit: 5

Course Objectives:

1. To enable the students to learn about the recent developments in home textiles
2. To gain knowledge about Lighting and Interior design.

Unit I

(18 Hours)

Introduction and Floor Coverings: Home Textiles- Introduction to home textiles, types of home textiles, factors influencing selection of home textiles, recent trends in home textiles. Floor coverings- carpets and rugs-carpet construction methods-carpet types-rugs- difference between carpet and rugs-use and care of carpets and rugs.

Unit II (18 Hours)

Curtains and Bed Linen: Curtains-selection of material-types of curtains and draperies - valance types. Bed Linen – classification of bed linen- flat sheet-fitted sheet-comforter-comforter's covers-duvet covers-bed skirts-blanket throws-mattress protectors-shams-pillow covers-selection of suitable bed linen-use and care.

Unit III (18 Hours)

Table Linen and Kitchen Linen: Table linen – definition- table runner-placemats-table cloth and its types-table skirting- coasters-chair covers. Soft furnishings for kitchen and dining, types of kitchen linens – kitchen towel, aprons, dish cloth, fridge, grinder and mixer 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.

Unit IV (18 Hours)

Interior Designing and Lighting: Definition of interior design - Elements and Principles. Lighting - Study of interior lighting. Artificial and natural lighting. Different types of lighting and their effects. Finishes and Decorative Accessories-Wall papers, Painting. Indoor Plants and Wall hanging.

Unit V (18 Hours)

Furniture and Furnishings: Study on furnishing materials of furniture for specific function of interior, like office furniture, residential furniture, display systems. cabinet, ward robes, room dividers, Innovations and design ideas.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the home furnishing, identifying suitable materials and products

CO2: Apply care and maintenance of home furnishing products

CO3: Analyze the types of floor coverings and its maintenance

CO4: Evaluate the recent trends in home furnishing

CO5: Prepare the doors and windows coverings

Textbooks:

1. V. Ramesh Babu, S. Sundaresan ,Home Furnishing,WPI India Publisher, 2018.
2. T Karthik, D GopalaKrishnan,Home Textiles, Daya Publishing House, 2016.

Reference Books:

1. Anne Hildyard, Cushions, Curtains and Blinds Step by Step, Dorling Kindersley Ltd Publisher,2017.
2. Razaq A Adekunle,Furnishings and Supplies,Amazon Digital Services LLC –KDP Print US Publisher, 2020.
3. Jessica Probus,Home Decor Cheat Sheets, Ulysses Press Publisher, 2016.

Journals:

1. Home Textiles Today
2. Journal of Textile Research
3. International Journal of Interdisciplinary Research

E-Resources:

1. <https://blog.fieldtexcases.com/woven-and-non-woven-textiles/>
2. <https://www.britannica.com/technology/floor-covering>
3. <https://www.thespruce.com/what-are-curtains-drapes-shades-and-blinds-4067656>
4. <https://www.hometown.in/home-furnishings>
5. <https://www.merriam-webster.com/dictionary/bed%20linen%28s%29>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	9	3	9	3	3	9	39
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	9	3	3	3	33
CO4	9	3	9	9	3	3	3	39
CO5	9	3	9	9	3	3	9	45
Total	33	21	33	45	15	21	33	201

Low-1 Medium-3 High-9

Core III - Home Textiles Practicals

(For Students Admitted from 2023-24)

Semester: I
Subject Code: IMFDC13P

Hours/week:6
Credit: 5

Course Objectives:

1. To study the Various Fabrics used for Furnishings
2. To gain practical knowledge about different Materials which are suitable for Home Furnishings.

List of Experiments

- 1. Create a theme for the Bedroom and construct the following items (18 Hours)**
 - a) Bed spread with quilted
 - b) Bed sheet with frills
 - c) Pillow & pillowcase
 - d) Wall hanging with reusable materials
- 2. Create a theme for the Living room and construct the following items (18 Hours)**
 - a) Basic pleated swag over panels valance curtain
 - b) Screen Printing/Painting cushion
 - c) Sofa covers
- 3. Create a theme for the Kitchen room and construct the following items (18 Hours)**
 - a) Apron with two side pockets
 - b) Pair of Hand gloves
 - c) Mitten
- 4. Create a theme for the Dinning set and construct the following items (18 Hours)**
 - a) Table cloth and Runners
 - b) Table mat
 - c) Tea cosy
 - d) Fruit basket
- 5. Create a theme for Bathroom set and construct the following items (18 Hours)**

- a) Bath robe, bath towel
- b) Shower cap, mat
- c) Wet mat

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the home furnishing, identifying suitable materials and products

CO2: Enable to start their own Home Furnishing Shop

CO3: Enhance their Skills in creating their own Home Furnishing Items

CO4: Establish themselves as Home Furnishing Chain Store Consultant

CO5: To become an Effective Home Furnishing Freelance Designer.

Textbooks:

1. V. Ramesh Babu, S. Sundaresan ,Home Furnishing,WPI India Publisher, 2018.
2. T Karthik, D GopalaKrishnan,Home Textiles, Daya Publishing House, 2016.

Reference Books:

1. Anne Hildyard, Cushions, Curtains and Blinds Step by Step, Dorling Kindersley Ltd Publisher,2017.
2. Razaq A Adekunle,Furnishings and Supplies,Amazon Digital Services LLC –KDP Print US Publisher, 2020.
3. Jessica Probus,Home Decor Cheat Sheets, Ulysses Press Publisher, 2016.

Journals:

1. Home Textiles Today
2. Journal of Textile Research
3. International Journal of Interdisciplinary Research

E-Resources:

1. <https://blog.fieldtexcases.com/woven-and-non-woven-textiles/>
2. <https://www.britannica.com/technology/floor-covering>
3. <https://www.thespruce.com/what-are-curtains-drapes-shades-and-blinds-4067656>
4. <https://www.hometown.in/home-furnishings>
5. <https://www.merriam-webster.com/dictionary/bed%20linen%28s%29>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	1	3	3	15
CO 2	3	3	3	9	3	9	9	39
CO 3	3	3	3	9	3	3	3	27
CO4	9	3	3	9	3	9	9	45
CO5	3	3	1	9	3	3	3	25
Total	21	15	11	37	13	27	27	151
	Low-1			Medium-3			High-9	

Core IV - Fashion Draping and Garment Construction Practicals

(For Students Admitted from 2023-24)

Semester: I**Subject Code: IMFDC14P****Hours/week:6****Credit: 5****Course Objectives:**

1. To be more creative in design to develop the draping skill of the students.
2. To develop the advanced draping techniques and their construction

Experiments**(20 Hours)****1. Draping and construction of Foundation Patterns**

Basic Bodice – Front, back with sleeve - Basic Shirt (Torso)

2. Design Variation and construction**(30 Hours)**

(Children, women and men) - Bodice Variations (include yoke & neckline variation) –

Dartless Shapers - Skirts - Pants - Shirt - Sleeves

3. Advanced Design Variations**(20 Hours)**

Dresses - Knits - Cowls

4. Stylized draping**(20 Hours)**

Saree, Blouse - Dhotis - Turbans - Classical costumes - Knit (Swim suit/Knit pant)

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Acquire the skills of draping on dress form by an introduction to terminology, understanding fundamentals and advanced techniques of draping**CO 2:** Identify about custom fitted, basic pattern to prepare many different styles**CO 3:** Analyse the various parts of the garments**CO 4:** Manipulate the basic draping into designer costumes drape**CO 5:** Develop the structure of a garment design using draping techniques**Text Books:**

1. Danilo Attardi, *Fashion Draping Techniques* Vol. 1, Hoaki Books SL Publisher, 2021
2. Karolyn Kiise, *Draping*, Laurence King Publishing, 2020

Reference Books:

1. Helen Joseph Armstrong-Susan P Ashdown, *Draping for Apparel Design*, Fairchild Books Publisher, 2021
2. Sally M DiMarco, *Draping Basics*, Bloomsbury Academic, 2016
3. Francesca Sterlacci, *Draping Techniques for Beginners*, Laurence King Publishing, 2019

Journals:

1. Textile Research Journal
2. International Design Journal
3. Journal of Pattern Making

E-Resources:

1. <https://style2designer.com/apparel/draping-mannequin/what-is-draping-technique-and-its-process/>
2. <https://fabricalchemist.com/2017/06/11/draping-3-sleeves/>
3. <https://www.universityoffashion.com/wpcontent/uploads/2013/06/StraightSkirtSloper.pdf>
4. <https://www.universityoffashion.com/wp-content/uploads/2013/06/YokeDirndlSkirt.pdf>
5. <https://www.moodfabrics.com/blog/intro-to-draping-dress-form-muslin-basics/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	9	1	9	1	9	9	41
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	3	9	9	9	45
CO4	3	3	1	3	1	9	9	29
CO5	9	9	9	9	3	9	9	57
Total	27	27	23	33	17	45	45	217

Low-1 Medium-3 High-9

Discipline Specific Elective I –a. Protective Clothing

(For Students Admitted from 2023-24)

Semester: I

Subject Code: IMFDE1A

Hours/week: 6

Credit: 5

Course Objectives:

1. Understand the dynamics of protective clothing
2. Gain knowledge on the methods of evaluating the protective garments

Unit I

(18 Hours)

Fibers, Yarns and Fabrics for Protective Garments : Fibers, yarns and fabrics for protective garments-Selection of fibers -suitability and properties of high performance fibers for various protective clothing, chemical composition and physical structure, characteristics and working of various fibers according to different end uses like thermal protection, ballistic protection, anti-microbial protection, Protection against cold.

Unit II

(18 Hours)

Chemical Finishes for Protective Garments: Chemical finishes for protective garments-Use of coated fabrics – different types of finishes like fire retardant finishes, water repellent finishes, chemical finishes against radiation and chemicals – method of application of those finishes; machines and techniques used for such applications; protective finishes for health care garments.

Unit III

(18 Hours)

Protective Garments in Other Applications: Protective garments in other applications-Protective fabrics used in the medical field and in hygiene; military combat clothing; protective fabrics against biological and chemical warfare; textiles for high visibility.

Unit IV

(18 Hours)

Garment Construction: Garment construction - method of construction of garments according to various protective end uses like protection against cold, heat, chemical, protection. Use of different fabric type - knitted, woven, and Non-woven; coated, laminated in protective applications different places.

Unit V

(18 Hours)

Evaluation of Protective Fabrics: Desirable properties of protective textiles, method of testing for thermal protective performance, water, cold, abrasion and wear resistance. evaluation of resistance in to mildew, ageing, sunlight, chemical, electrostatic and electrical resistivity, impact properties; ASTM standards for protective garments.

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Understand the meaning and uses of protective clothing

CO 2: Appraise suitable fibers, yarns, fabrics and finishes for protective clothing

CO 3: Understand the methods of creating suitable fabrics for protective clothing

CO 4: Plan protective clothing to suit the needs of the wearer

CO 5: Develop protective clothing

Text Books:

1. Bhupendra Singh Butola, Shahid Ul Islam, *Advances in Functional and Protective Textiles*, Elsevier Science, 2020
2. Krister Forsberg, Lawrence H. Keith, *Chemical Protective Clothing Permeation and Degradation Compendiu*, Taylor & Francis, 2019

Reference Books:

1. Chuansi Gao, F. Wang, *Protective Clothing Managing Thermal Stress*, Elsevier Science 2014
2. Krister Forsberg, Ann Van den Borre, Norman Henry, III, James P. Zeigler *Quick Selection Guide to Chemical Protective Clothing*, Wiley, Krister Forsberg 2014
3. Guowen Song, Sumit Mandal, René Rossi, *Thermal Protective Clothing for Firefighters* Elsevier Science, 2016

Journals:

1. Journal of Human health Research
2. Journal of industrial Textiles
3. International Journal of clothing science and technology

E-Resource:

1. <https://eu.tencatefabrics.com/>
2. <https://atira.in/protective-textiles-guide/>
3. <https://www.fibre2fashion.com/industry-article/69/all-about-chemical-protective-clothing>
4. <https://www.fibre2fashion.com/industry-article/38/protective-clothing-protects-your-business>
5. <https://pubmed.ncbi.nlm.nih.gov/731025/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	1	1	3	9	3	23
CO 2	3	3	1	3	1	9	9	29
CO 3	3	3	1	9	3	9	9	37
CO4	9	9	9	3	9	3	9	51
CO5	3	3	1	3	1	3	3	17
Total	21	21	13	19	17	33	33	157

Low-1 Medium-3 High-9

Discipline Specific Elective I –b. Sustainability in Textile and Fashion

(For Students Admitted from 2023-24)

Semester: I

Subject Code: IMFDE1B

Hours/week: 6

Credit: 5

Course Objectives:

1. To acquire knowledge in sustainable concepts and its importance in Textile and fashion Industry.
2. To develop ideas in environmental impact and sustainability associated to fashion Industry.

Unit I

(18 Hours)

Sustainable development: Introduction concepts and definitions- Renewable energy, non-renewable energy and - Designs – Slow, Participatory, Open source, Biomimicry and Sustainable designs. Fast fashion, Passive Fashion, New Fashion Ethics and New Aesthetic Ethics.

Unit II

(18 Hours)

Fiber & Fabric Processing: Alternative fibers, Spinning, Weaving and Knitting - Fabric Finishing, Bleaching, Dyeing, Printing and Specialist fabric finishing. Cut, Make and Trim.

Unit III

(18 Hours)

Reuse, Recycle and Reduce: Innovating to Reduce the Impact of Use Phase- Process, Product and Consumer Focus, Locally Made Globally Relevant, Distinctiveness, Durability, Appropriateness.

Unit IV

(18 Hours)

Textiles and Fashion Industry Impacts: Life Cycle Analysis, techniques used in LCA, standard test method for textiles sustainability, eco labels.

Unit V

(18 Hours)

The Consumer and Future Challenges: Future of Fabric: Healthy and sustainable - Reversing the Escalators of Consumption- Reform.

Course Outcomes:

After successful completion of the course, the student will be able to

CO1: Improve their ability to creative ideas in research and development to make sustainable textiles.

CO 2: Execute environmentally friendly textile manufacturing in working place.

CO 3: Describe the need for Sustainable textiles and fashion

CO 4: Select Sustainable Textile design and processing methods

CO 5: Manufacture sustainable textile products for all types of customer needs.

Text Books:

1. Rajkishore Nayak ,*Sustainable Fibres for Fashion and Textile Manufacturing*, Elsevier Science, 2022
2. Subramanian Senthilkannan Muthu, *Sustainable Fibres and Textile*, Elsevier Science 2017

Reference Books:

1. Rajkishore Nayak, *Sustainable Technologies for Fashion and Textiles*, Elsevier Science, 2019
2. Kunal Singha, Pintu Pandit, Sanjay Shrivastava, Shakeel Ahmed, *Recycling from Waste in Fashion and Textiles A Sustainable and Circular Economic Approach* Wiley, 2020
3. Nikolay Anguelov, *Sustainable Fashion Quest Innovations in Business and Policy*, Taylor & Francis, 2021

Journals:

1. International Journal of Sustainability Engineering
2. Journal of Textile Science Engineering
3. Journal of Sustainability and fashion

E-Resource:

1. <https://www.undp.org/sustainable-development-goals>
2. <http://emeraldbe.com/sustainable-development->
3. <https://www.shiksha.com/online-courses/articles/importance-of-sustainable-development-and-its-objectives/>
4. <https://www.conserve-energy-future.com/what-is-sustainable-development-and-its-goals.php>
5. <https://www.acciona.com/sustainable-development/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	9	3	3	1	9	43
CO 2	9	1	1	3	9	1	3	27
CO 3	3	1	1	3	3	1	1	13
CO4	3	1	1	3	3	1	1	13
CO5	9	3	3	3	3	3	3	27
Total	33	15	15	15	21	7	17	123

Low-1 Medium-3 High-9

Extra Credit - Clothing Appearance and Fit

(For Students Admitted from 2023-24)

Semester: I**Subject Code: IMFDX1****Credit: 2****Course Objectives:**

1. Learn about perceptions of body appearance and its relations to clothing
2. Know about the concepts of Virtual reality, 3D Body scanning, Sizing systems

Unit I

Perception of Body Appearance and its Relation to Clothing Introduction – Beauty - Facial attractiveness, body physical attractiveness, body image, modification of body appearance by dressing, fabric properties related to clothing appearance & fit.

Unit II

Assessment of Clothing Appearance: Introduction - Assessment of fabric surface smoothness, seam appearance, crease retention, appearance retention of finished garments, and reliability of subjective assessment. Objective evaluation of fabric wrinkling, fabric pilling, seam pucker, overall garment appearance

Unit III

Assessment of Clothing Fit: Definition of fit - Influences on clothing fit, testing methods for dimensional fit, subject rating scales, subjective fitting guide, Virtual reality – Body cloths trial. 3-d Body Scanning – Introduction - global development of body scanners, principles and operations of body scanning technologies, bench marking. Challenges of 3D body scanning. Garment drape - measurement of fabric drape.

Unit IV

Textiles and Cosmetics: Textile-Development of cosmetic textiles using microencapsulation technology-air suspension coating-pan coating-emulsion hardening process-cosmetic textile products- advantages and disadvantages.

Unit V

Appearance Management Through Clothing: Human Anthropometrics and Sizing Systems- Terms and definitions - Traditional anthropometry, Historical development of sizing system. Impact of physical appearance on attributions of specific traits –Body languages and clothes for presentations –Rejuvenating the fashion and clothing curriculum.

Course Outcomes:

After successful completion of the course, the student will be able to

CO1: Understand the Perceptions of body appearance and its relations to clothing

CO2: Apply the concepts of assessment of clothing appearance and fit, Virtual Reality, 3D Body scanning, Sizing systems

CO3: Evaluate the principles of cosmetic textiles in textile industry.

CO4: Analyse the Human Anthropometrics and systems

CO5: Create the Impact of physical Appearance on attributions of specific traits

Text Books:

1. Clothing Appearance and Fit Science and Technology, J.Fan, W.Yu and Hunter, Woodhead, 2011
2. Anthropometry Apparel Sizing and Design, Deepti Gupta and NorsaadahZakaria, Woodhead, 2014

Reference Books:

1. Fashioning Models: Image, Text and Industry, Joanne Entwistle and Elizabeth Wissinger, Bery in an Imprint Bloomsbury, 2012
2. Body Language, Allan Pease, Manjul Publishing House, 2014.
3. Fabric Testing, Jinlian Hu, Woodhead, 2022

Journals:

1. Journal of Human health Research
2. Journal of industrial Textiles
3. International Journal of clothing science and technology

E-Resources:

1. https://swayam.gov.in/nd1_noc19_te08/preview
2. http://ugcmoocs.inflibnet.ac.in/ugcmoocs/view_module_ug.php/145
3. <http://vr.cs.uiuc.edu/vrbook.pdf>
4. <https://www.fiber2fashion.com/industry-article/877/e-fit-the-latest-technology-for-perfect-fit>
5. <https://pciaw.org/covid-19/pciaw-sizing-wardrobe-management-webinar-in-partnership-with-gerber-technology-update/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	9	3	9	9	39
CO 2	9	1	1	9	3	9	9	41
CO 3	9	1	1	3	9	9	9	41
CO4	3	1	1	3	3	9	9	29
CO5	9	3	3	3	1	9	9	37
Total	33	9	9	27	19	45	45	187

Low-1 Medium-3 High-9

Core V - Textile Testing and Quality Control

(For Students Admitted from 2023-24)

Semester: II

Subject Code: IMFDC21

Hours/week: 6

Credit: 5

Course Objectives:

1. To impart knowledge in basics of testing and the testing atmospheric conditions in a testing lab.
2. Enables the students to know about the various textile testing equipment as well as their

working principles.

Unit I (18 Hours)

Introduction to testing: objectives, importance and types of testing, International Quality parameters and standards like AATCC, ASTM, BIS etc. Humidity- absolute and relative (moisture content and regain) , Standard atmospheric conditions, Moisture and Humidity – its importance and relationship to textiles, Determination of humidity – Wet and Dry bulb hygrometer and sling hygrometer, Measurement of moisture regain and content by Conditioning oven method.

Unit II (18 Hours)

Fiber Testing: Cotton fiber length –determination of fibre length by Baer sorter method, Fineness – Air flow principle – determination of fibre fineness by Sheffield micronaire method, fibre maturity – Caustic soda swelling method, fibre strength – determination of fibre strength by Pressley bundle strength tester and Stelometer method, Determination of trash and lint in cotton by Shirley trash analyzer method.

Unit III (18 Hours)

Yarn Testing: Yarn numbering system – conversion of count from one system to another, Instruments for count determination – Quadrant balance, Beesely balance. Yarn strength testing – principles of CRT, CRL, CRE – Single yarn strength tester, Lea strength tester. Yarn twist- Direction of twist, Twist testers – Tension type twist tester, Yarn evenness – classification of variation, methods of measuring evenness using black board method, Uster evenness tester, determination of yarn hairiness and yarn crimp.

Unit IV (18 Hours)

Fabric testing: fabric weight, cover factor, fabric thickness. Fabric strength – fabric tensile strength tester, tearing strength tester, hydraulic bursting strength tester. Fabric abrasion resistance- Martindale abrasion tester, Fabric pilling – ICI pillbox tester. Fabric drape – Measurement of drape, fabric stiffness – Shirley stiffness tester. Fabric crease resistance - crease recovery tester, Fabric permeability – Shirley air permeability tester.

Unit V (18 Hours)

Color fastness in textiles: importance and factors affecting colourfastness colour fastness to Crocking - dry and wet, perspiration – acid and alkaline, sunlight, laundering, pressing and dry-cleaning aspects. Grey scales and ratings.

Course Outcomes:

After successful completion of the course, the student will be able to

CO 1: Describe the terms related to testing

CO 2: Understand the concepts and principles underling the tests and its equipment

CO 3: Apply the knowledge and conduct the tests

CO 4: Appraise the quality of the fiber, yarn and fabric

CO 5: Test the fiber, yarn and fabrics

Text Books:

1. Gopalakrishnan, Textile Testing, Astral International Pvt. Limited, 2020

2. Olivier Vermeersch, Patricia Dolez, Valério Izquierdo, *Advanced Characterization and Testing of Textiles*, Elsevier Science, 2017.

Reference Books:

1. Lijing Wang, Performance Testing of Textiles Methods, Technology and Applications, Elsevier Science, 2016
2. Thomas Gries, Dieter Veit, Burkhard Wulfhorst, Textile Technology, Carl Hanser Verlag GmbH & Company KG, 2015
3. Abher Rasheed, Ali Afzal, Faheem Ahmad, Sheraz Ahmad, Advanced Textile Testing Technique , CRC Press, 2017

Journals:

1. Journal of Textile Analysis, Quality Control & Innovative Uses
2. Journal of The Textile Institute
3. Textile Research Journal

E-Resource:

1. <https://www.fibre2fashion.com/industry-article/4183/technical-parameters-of-the-textile>
2. <https://textilelearner.net/different-types-of-textile-testing-methods/>
3. <https://textilelearner.net/yarn-testing-in-textile/>
4. <https://humiditycontrol.com/what-is-textile-testing/>
5. https://en.wikipedia.org/wiki/Colour_fastness

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	1	3	3	3	3	3	19
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	3	9	9	9	45
CO4	3	3	1	3	1	9	9	29
CO5	9	9	9	9	3	9	9	57
Total	27	19	25	27	19	39	39	195

Low-1 Medium-3 High-9

Core VI - Textile Testing Practicals

(For Students Admitted from 2023-24)

Semester: II
Subject Code: IMFDC22P

Hours/week: 6
Credit: 5

Course Objectives:

1. To practice the various textile testing equipment in standard atmospheric conditions
2. Know about the concepts and principles followed in testing various parameters

List of Experiment

(90 hours)

Operate the equipment without any assistance while carrying out the testing of fibres, yarns and fabrics.

1. Determination of fabric weight of the given fabric.

2. Determination of Thickness of the given Fabric.
3. Determination of Tensile Strength of the given Fabric.
4. Determination of Stiffness of the given Fabric.
5. Determination of Abrasion Resistance of the given Fabric.
6. Determination of Crease Recovery of the given Fabric.
7. Determination of Drape of the given Fabric.
8. Determination of Tearing strength of the given fabric.
9. Determination of Bursting Strength of the given Fabric.
10. Determination of Colour Fastness of the given Fabric by Crock meter.
11. Determination of Colour Fastness of the given Fabric by Pressing.
12. Determination of Shrinkage of the given Fabric.

Course Outcomes:

After successful completion of the course, the student will be able to

CO 1: Understand the concepts and principles underlying the tests and its equipment

CO 2: Test the fiber, yarn and fabrics

CO 3: Establish results from the readings obtained from the tests performed

CO 4: Appraise the quality of the fiber, yarn and fabric

CO 5: Apply the knowledge and conduct the tests during research activities Laundro meter

Text Books:

1. Gopalakrishnan, Textile Testing, Astral International Pvt. Limited, 2020
2. Olivier Vermeersch, Patricia Dolez, Valério Izquierdo, Advanced Characterization and Testing of Textiles, Elsevier Science, 2017.

Reference Books:

1. Lijing Wang, Performance Testing of Textiles Methods, Technology and Applications, Elsevier Science, 2016
2. Thomas Gries, Dieter Veit, Burkhard Wulfhorst, Textile Technology, Carl Hanser Verlag GmbH & Company KG, 2015
3. Abher Rasheed, Ali Afzal, Faheem Ahmad, Sheraz Ahmad, Advanced Textile Testing Technique , CRC Press, 2017

Journals:

1. Journal for Advanced textile testing techniques
2. Journal for Textile testing and analysis
3. Journal for Physical testing of textiles

E-Resources:

1. <https://www.fibre2fashion.com/industry-article/4183/technical-parameters-of-the-textile>
2. <https://textilelearner.net/different-types-of-textile-testing-methods/>
3. <https://textilelearner.net/yarn-testing-in-textile/>
4. <https://humiditycontrol.com/what-is-textile-testing/>
5. https://en.wikipedia.org/wiki/Colour_fastness

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	9	3	9	9	39
CO 2	9	1	1	9	3	9	9	41
CO 3	9	1	1	3	9	9	9	41
CO4	3	1	1	3	3	9	9	29
CO5	9	3	3	3	1	9	9	37
Total	33	9	9	27	19	45	45	187

Low-1

Medium-3

High-9

Core VII - Advanced Illustration Design Art and Painting Practicals

(For Students Admitted from 2023-24)

Semester: II**Hours/week: 6****Subject Code: IMFDC23P****Credit: 5****Course Objectives:**

1. To gain the knowledge on characteristics of selected World art.
2. To understand the nuances of Indian Painting

List of Experiment**(45 hours)****Sketch the following World Art forms and design the same in a garment**

(part of the design or full, with or without modification)

(with pencils, pens, acrylics, oil paints, watercolors, inks or any other medium)

1. Baroque
2. Impressionism
3. Cubism
4. Surrealism
5. Futurism
6. Rococo

Draw sketches of the Indian Paintings and Design the same in a garment.**(45 hours)**

1. Rajput painting
2. Mysore painting
3. Tanjore painting
4. Kalamkari painting
5. Warli painting
6. Gond painting
7. Mural painting

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Develop World art forms in paper**CO2:** Redraw the Indian paintings**CO3:** Understand the nuances of art forms and paintings**CO4:** Analyse the design details

CO5: Recreate the art and painting designs in garment styles

Text Books:

1. Kathryn Hagen, Fashion Illustration for Designers, Press Publisher, Second Edition, 2017.
2. Irina Ivanovo, Haute Couture Fashion Illustration, Art Design Project, Incorporated Publisher, 2016.

Reference Books:

1. Michele Wesen Bryant, Fashion Drawing, Second Edition, Laurence King Publisher, 2016.
2. Julius Wiedemann, Illustration Now Fashion, Taschen Publisher, 2017.
3. Anna Kiper, Fashion Illustration Inspiration and Techniques, David & Charles Publisher, 2016.

Journals:

1. Journal of Illustration
2. Journal of Illustration Solutions
3. Journal of design

E-Resources:

1. https://en.wikipedia.org/wiki/Fashion_illustration
2. <https://www.iskn.co/fashion-illustration-basics/>
3. <http://www.vogue.co.uk/gallery/fashion-illustration>
4. <http://www.purfe.com.au/top-5-fashion-illustration-books/>
5. <https://www.shutterstock.com/search/women+hair+style+illustration>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	3	1	1	13
CO 2	9	3	9	9	3	1	3	37
CO 3	9	9	9	9	3	3	3	45
CO4	3	1	9	9	3	1	3	29
CO5	3	3	3	9	9	1	9	37
Total	27	19	31	37	21	7	19	161

Low-1 Medium-3 High-9

Core VIII - CAD in Textile and Fashion Practicals

(For Students Admitted from 2023-24)

Semester: II

Subject Code: IMFDC24P

Hours/week: 6

Credit: 5

Course Objectives:

1. To understand the methods and techniques used to analyze the garment design and textile design.
2. To create the basic techniques of head theories based on children, women and men.

Experiment:

(90 hours)

1. Development of Croquies based on the Head Theories for Children in various Poses.
2. Development of Croquies based on the Head Theories for Women in various Poses.

3. Development of Croquies based on the Head Theories for Men, in various Poses.
4. Texture Mapping– Mapping of Original Color.
5. Texture Mapping– Stripped Designs.
6. Texture Mapping– Checks and Printed Designs.
7. Texture Mapping – One way and Overall Designs.
8. Draping of Fabric on the Croquies – Children.
9. Draping of Fabric on the Croquies – Women.
10. Draping of Fabric on the Croquies– Men.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify the variety of digital image making techniques, understanding the technical illustration, pattern manipulation and design layout

CO2: Apply the pattern, grading and design development to the fashion industry

CO3: Analyze the draping of Fabric on the Croquies r children, women and men

CO4: Design digital textile weave structure and jacquard design

CO5: Create Texture Mapping and Virtual Fashion

Textbooks:

1. Robert Hume, Fashion and Textile Design with Photoshop and Illustrator, Bloomsbury Publishing, 2019
2. Jane Alvarado, ComputerAided Fashion Design Using Gerber Technology, Bloomsbury Publisher, 2018

References Books:

1. RuthHuoh, Fashion Design, New York Publisher, 2017.
2. Patrice Free burger George, Fashion Institute ofTechnology, The Digital Dawn, State UniversityofNew York Publisher, 2020.
3. Joanne Sherrow, Photoshop and Illustrator for Fashion and Textile Design, Fairchild Books Publisher, 2015.

Journals:

1. Journal of CAD
2. Journal of CAD Application
3. Journal of CAD Designing

E-Resources:

1. <https://textilelearner.net/computer-aided-fashion-designing/>
2. <https://www.textileblog.com/cad-cam-in-textile-and-garment-industry/>
3. <https://textilelearner.net/application-of-cad-in-textile/>
4. <https://www.onlineclothingstudy.com/2018/10/cad-system-and-its-application-in.html>
5. <https://textilevaluechain.in/in-depth-analysis/5-ways-computer-aided-design- benefits-the-textile- industry/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	9	3	9	9	39
CO 2	9	1	1	9	3	9	9	41
CO 3	9	1	1	3	9	9	9	41
CO4	3	1	1	3	3	9	9	29
CO5	9	3	3	3	1	9	9	37
Total	33	9	9	27	19	45	45	187

Low-1 Medium-3 High-9

Discipline Specific Elective II –a. Export Trade and Documentation

(For Students Admitted from 2023-24)

Semester: II

Hours/week: 6

Subject Code: IMFDE2A

Credit: 5

Course Objectives:

1. To obtain knowledge in import and export management features and procedures.
2. Understanding about the benefits and supports provided by Government of India.

Unit I

(18 Hours)

Import Export Management Introduction: Concept Key Feature, Foreign Trade – Institutional Framework and Basics; Trade Policy, Simplification of Document, Reduction in Document to Five for Custom Purpose – Exporting and Importing Counter Trade.

Unit II

(18 Hours)

Export Procedures: Registration of firms with authorities, PAN No, IE code, BIN No, EPC, Central Excise- Category of exports: Direct, indirect, third party exports.- Manufacturer exporter, merchant exporter, EOU/SEZ/ - Five types of Export Houses - Export benefits-market development assistance - GSP and GSTP rules as per the FT policy.

Unit III

(18 Hours)

Import Procedures: Procurement planning, and project imports regn. Identification, selection of suppliers - Purchase contract, terms of payments - Terms of Delivery Inco terms- Import policy ITC HS- Role of a customs house agent and freight forward agents- Type of customs duties, valuation rules- Complete documentation and procedures for import clearance at sea port- Customs clearance of imports by sea and air documents, procedures. - Imports under various imports notification issued by customs.

Unit IV

(18 Hours)

Export Assistance of India: Introduction, Importance of Export Assistance, Export Promotion Measure in India -Expansion of Production Base for Exports; Relaxation in Industrial Licensing Policy /MRT/ FER/ Foreign Collaborations, Liberal Import of Capital Goods, EPZ / EOU -Assured Supply of Raw-Material Imports -Eligibility for Export/ Trading - Export Houses Status for Export of Services-Fiscal Incentives, Financial Incentives; Strengthening Export Marketing Effort.

Unit V**(18 Hours)**

Export Marketing: Introduction and various types of export documents – Pre- shipment and Post-shipment documents – Pre-Shipment and Post- Shipment finance. Export duty draw back – pass book – capital goods import license and assistance. Types of bill of lading.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the importance of quality control, identifying the apparel quality control process

CO2: Integrate consumer, aesthetic and quantitative trend information into the product development process

CO3: Estimate the new value into an existing product or line while holding costs

CO4: Evaluate the fabric and sewing defects

CO5: Manage the fabric quality and standards

Text Books:

1. Madhurima Lall, Sultan Ahmad, Export Import: Procedure and Documentation, Sultan Chand & Sons, 2021
2. Khushpat S. Jain, Apexa V. Jain, Export-import Procedures and Documentation, Himalaya Publishing House, 2017

References:

1. Yurdagul Meral, Tools and Techniques for Implementing International E-Trading Tactics for Competitive Advantage, IGI Global, 2019
2. George W. Thompson, Catherine J. Petersen, Exporting Regulations Documentation Procedures, Global Training Center, • 2022
3. Chase C. Rhee , Principles of International Trade Import-Export Publisher Author House,2018

Journals:

1. Journal of Business research
2. Journal of International marketing
3. International journal of production

E-Resources:

1. <https://www.hqts.com/apparel-quality-control-standards-and-procedures/>
2. <https://asq.org/quality-resources/learn-about-standards>
3. <https://www.intertek.com/textiles/inspection/>
4. <https://www.woolwise.com/wp-content/uploads/2017/05/07.2-Textile-Quality-Management-Notes.pdf>
5. <https://www.onlineclothingstudy.com/2019/02/classification-of-fabric-defects.html>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	9	3	3	3	3	3	9	33
CO 2	3	3	1	1	1	3	3	15
CO 3	9	9	9	9	3	3	9	51
CO4	3	3	3	1	1	3	9	23
CO5	3	3	3	3	1	3	9	25
Total	27	21	19	17	9	15	39	147

Low-1 Medium-3 High-9

Discipline Specific Elective II –b. Visual Merchandising

(For Students Admitted from 2023-24)

Semester: II

Hours/week: 6

Subject Code: IMFDE2B

Credit: 5

Course Objectives:

1. To understand the fundamentals of successful display
2. To acquire knowledge in the field of visual merchandising

Unit I

(18 Hours)

Display Basics: Purpose of display, Color and texture, line and composition, light and lighting, Types of Display and Display settings, The exterior of the store, Window Display, Store interiors. Marketing – types, four P,s, fashion promotion advantages, trade shows, Market weeks, exhibitions, market survey and research.

Unit II

(18 Hours)

Use of Successful Displays & Brands: Mannequins, Alternatives to the mannequins, Dressing the Three-Dimensional form, Fixtures, Visual Merchandising dressing fixtures, Modular fixtures and systems in store planning. Style addicts, The first fashion brand, Death of fashion & Rebirth of fashion.

Unit III

(18 Hours)

Visual Merchandising and Its Techniques: Attention getting Devices, Color devices, Color plates, Familiar symbols, Masking & Proscenia Sale Ideas, Fashion accessories, Graphics and Signage. Current trend & trend fabrics.

Unit IV

(18 Hours)

Visual Merchandise Planning: Visual Merchandise planning, Setting up a Display store, Store planning and Design, Visual Merchandising and the changing face of retail.

Unit V

(18 Hours)

Areas of Visual Merchandising: Point-of-Purchase display, Exhibit and Trade show design– Industrial Display, Fashion shows, Trade Organizations and sources, Career opportunities in Visual Merchandising. Create a window display based on the current trends & theme.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the purpose of merchandising, identifying marketing strategies in the industries

CO2: Interpret merchandising plan and sales forecasting

CO3: Organize creative design process of merchandising

CO4: Analyze the elements of costing, sourcing and pricing

CO5: Develop the production systems and implement quality control

Text Books:

1. Tony Morgan, Visual Merchandising, Third Edition, Laurence King Publishing, 2016
2. Tony Morgan, Visual Merchandising Fourth Edition, Quercus Publishing, 2022

Reference Books:

1. Sarah Bailey, Jonathan Baker, Visual Merchandising for Fashion, Bloomsbury Publishing, 2021
2. Martin M. Pegler, Anne Kong, Visual Merchandising and Display Studio Instant Access, Bloomsbury Academic, 2018
3. Diah Octaviany Nur Sabrina and Suresh Kumar, Visual Merchandising, Sales Promotion, and Credit Card Usage Influence Impulse Buying Behavior, Publisher: Rasibook, 2020

E Resource:

1. https://www.eriesd.org/cms/lib/PA01001942/Centricity/Domain/1344/m_e_ch_18.pdf
2. <https://www.fibre2fashion.com/industry-article/5072/visual-merchandising-with-mannequins>
3. <https://textilelearner.net/visual-merchandising/>
4. [https://www.nsdcindia.org/scmp/assets/image/10419960-Departmental-Manager_FULL_BOOK\(SLIEM_SKILLS\)-10-21.pdf](https://www.nsdcindia.org/scmp/assets/image/10419960-Departmental-Manager_FULL_BOOK(SLIEM_SKILLS)-10-21.pdf)
5. https://ebooks.lpude.in/management/mba/term_4/DMGT552_VISUAL_MERCHANDISING.pdf

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	3	3	9	3	27
CO 2	3	3	9	9	3	1	9	37
CO 3	3	3	3	9	1	3	3	25
CO4	3	1	1	1	3	1	3	12
CO5	3	3	3	3	1	1	3	17
Total	15	13	19	25	9	15	30	119

Low-1 Medium-3 High-9

Extra Credit - Scientific Writing for Project

(For Students Admitted from 2023-24)

Semester: II

Subject Code: IMFDX2PW

Credit: 2

Course Objectives:

1. To explain the structure of scientific writing, how to create a scientific writing, how to make poster for scientific writing, how to make presentation for scientific writing, how to present scientific writing and how to read a scientific writing
2. To provide students with knowledge and skills on scientific research starting from research proposal writing

Unit I

Scientific Writing as a means of communication: Different forms of scientific writing. Articles in Journals: Research notes and reports, Review articles, Monographs, Dissertations, Bibliographies, Books chapters and articles.

Unit II

How to formulate outlines: The reason for preparing outlines – as a guide for plan of Writing as skeleton for the manuscript.

Types of outline: Topic outline, Conceptual outline, Sentence outlines, Combination of topic and sentence outlines

Unit III

Drafting titles, subtitles, tables, illustrations: Tables as systematic means of presenting data in rows and columns and lucid way of indicating relationships and results.

Formatting tables: Title, Body stab, Stab column, Column head, Spanner head, Box head. Appendices: Use and guidelines.

Unit IV

The writing Process: Getting started, Use outline as a starting device, Drafting, Reflecting. Re-reading: Checking organizations, Content, Clarity, Grammar, Brevity and precise in Writing, Drafting and

Redrafting based on critical evaluation.

Unit V

Parts of dissertation/research report/Journal: Introduction, Review of literature, Methods, results and discussion, Summary and abstract, References.

Writing for grants: The question to be addressed, Rational and importance of the question being addressed, Empirical and theoretical framework, presenting pilot study/data or background information, Research proposal and time frame, Specificity of methodology, organization of different phases of study, expected outcome of study and its implications, Budgeting, Available infrastructure and resources and Executive summary.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Recall the strategies and reasons for publishing research and discuss the different types of scientific writing

CO2: Apply the knowledge on implementing outlines as a guide to plan the manuscript

CO3: Analyse and reflect on your thinking processes and growth to identify strategies for improving academic writing and language skills

CO4: Evaluate the drafting process based on the script outline and re- reading the content to precise the writing for project

CO5: Write a series of analytical, creative, and coherent writing projects, including original research with primary and secondary sources

Text Books:

1. Claudio Dr. Luz, How to Write and Publish a Scientific Paper: The Step by Step Guide Paperback, Publisher, Dr. Luz Claudio, 2016.
2. Gastel Barbara and Day Robert, How to Write and Publish a Scientific Paper, Green wood Publisher, 8th Edition, 2016.

Reference Books:

1. Thomas C.George, Research Methodology and Scientific Writing, Ane Books Pvt.Ltd, 1st Edition, 2016.
2. Robert A. Day Barbara Gaste, How to Write and Publish a Scientific Paper, Green Wood Publisher,8th Edition,2016.
3. Wayne C. Booth Gregory G. Colomb Joseph M. Williams, The Craft of Research, 3rd Edition, Publisher University of Chicago, 2011.

Journals:

1. Scientific Journal
2. Journal of Writing Research
3. International Journal of Education Research

E-Resources:

1. <https://www.pdfdrive.com/from-research-to-manuscript-a-guide-to-scientific-writing-e185397339.html>
2. <https://www.pdfdrive.com/how-to-write-illustrate-a-scientific-paper-e158701474.html>
3. <https://www.pdfdrive.com/research-methodologies-for-beginners-e185804256.html>
4. <https://www.pdfdrive.com/handbook-of-scientific-proposal-writing-e165569300.html>
5. <https://www.pdfdrive.com/writing-convincing-research-proposals-and-effective-scientific-reports-e53393242.htm>

Course Outcomes	Programme Outcomes							Total
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
CO1	9	3	9	9	9	1	9	49
CO2	9	3	9	9	9	3	9	51
CO3	9	9	9	9	9	9	9	63
CO4	9	9	3	3	3	1	3	31
CO5	9	9	9	3	9	3	3	45
Total	45	33	39	33	39	17	33	239

Low-1 Medium-3 High-9

Core IX – Knitting Technology

(For Students Admitted from 2023-24)

Semester: III
Subject Code: IMFDC31**Hours/week: 6**
Credit: 5**Course Objectives:**

1. To study about elements of knitting and principles of knitting technology.
2. To gain knowledge on computerized knitting machine.

Unit I (18 Hours)**Introduction Knitting:** Definition, Classification and History, Types of Knitting – Hand and Machines, Characteristics of Knitted Goods.**Unit II (18 Hours)****Knitting terms:** General terms and principles of knitting technology; machine knitting, parts of machines, Knitted loop structure, stitch density.**Unit III (18 Hours)****Weft Knitting:** Classifications – 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 .**Unit IV (18 Hours)****Warp Knitting:** lapping variations – tricot, raschel, simplex and Milanese – kitten raschel – single bar, 2 bar, multi bar machines, production of nets, curtains, heavy fabrics, elasticized fabrics.**Unit V (18 Hours)****Electronics in Knitting :** The compatibility of electronic signals and knitting data, Microprocessors and computers. The computerized knitting machine, computer graphics and pattern preparation. The stoll CAD pattern preparation system.**Course Outcomes:**

After successful completion of this course, student will be able to

CO1: Understand the Knitting machine and working principles.**CO2:** Understand the Knitting fabric and its techniques.**CO3:** Knowledge on various web structures and formation.**CO4:** Understand the Warp Knitting processes.**CO5:** Understand the advanced Electronics knitting processes.**Text Books:**

1. Kunal Singha, Pintu Pandit, Sohel Rana, Subhankar Maity, Advanced Knitting Technology, Elsevier Science, 2021
2. K. Thangamani, S. Sundaresan, Fabric Manufacturing Technology Weaving and Knitting, CRC Press, 2022

References Book:

1. Yordan Kyosev, Warp Knitted Fabrics Construction, CRC Press, 2019

2. The Complete Technology Book on Textile Spinning, Asia Pacific Business Press Inc, 2017
3. Pat Treusch, Robotic Knitting, transcript Verlag, 2020

Journal:

1. Journal of Textile Research
2. Journal of Knitting Technology
3. International Journal of Textile and Research

E Resource:

1. <https://www.slideshare.net/Farhanullahbaig/knitting-70772140>
2. <https://www.scribd.com/presentation/392590554/Textilestudycenter-com-Knitting-Terms-and-Definition-converted>
3. <https://www.onlineclothingstudy.com/2020/08/classification-of-knitting-machines.html>
4. <https://textilelearner.net/tricot-warp-knitting-machine-parts-working-principle/>
5. <https://www.slideshare.net/drskathirvelu/electronic-controls-in-knitting>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	9	3	9	9	39
CO 2	9	1	1	9	3	9	9	41
CO 3	9	1	1	3	9	9	9	41
CO4	3	1	1	3	3	9	9	29
CO5	9	3	3	3	1	9	9	37
Total	33	9	9	27	19	45	45	187

Low-1 Medium-3 High-9

Core X - Research Methodology and Statistics

(For Students Admitted from 2023-24)

Semester: III**Hours/week: 6****Subject Code: IMFDC32****Credit: 5****Course Objectives:**

1. Develop a research orientation and to acquaint them with fundamentals of research Methods.
2. Provide the methodology and scope of various modes of presentation of data.

Unit I**(18 Hours)**

Meaning and Definition of research: Objective – Types of research – significance – Selecting and defining the problem. Methods of collecting data – Non- random and random sampling methods.

Unit II**(18 Hours)**

Questionnaire and schedule: Scaling Techniques. Classification and Tabulation – Formation of Frequency tables. (Grouped and Ungrouped data) – Simple Problems - Diagrammatic and Graphical representations.

Unit III**(18 Hours)**

Measures of Central Tendency: Mean, Median, Mode. **Measures of Dispersion:** Range, Mean Deviation, Standard Deviation and Coefficient of Variation. – Merits and Demerits – Simple Problems. **Correlation-** Scatter diagram method - Karl Pearson's co-efficient of correlations and Spearman's Rank co-efficient of correlations – Simple Problems. **Regression:** Definition – Uses - regression lines- regression equations- properties (statement only)- Simple Problems.

Unit IV (18 Hours)

Probability: definition – concept – Proofs of addition and multiplication theorems – Basic Theoretical distributions – Binomial, Poisson and Normal (concept only) - Testing of hypothesis - Types of Errors – large sample tests for means and proportions and small sample tests for means.

Unit V (18 Hours)

Chi-square test for independence of attributes: Analysis of variance techniques (one-way only) - Non-Parametric tests – Sign test, Run test, Mann-Whitney u test - simple problems.

Course Outcomes:

After successful completion of the course, student will be able to

CO1: Define and identify the knowledge of the scientific method, purpose and approaches to research

CO2: Illustrate the statistical techniques to research data for analyzing and interpreting data

CO3: Explain the types of research, with research process and research designs

CO4: Assess the appropriate sampling techniques for research work

CO5: Summarize the sampling process for data collection

Text Books

1 Research Methodology, Methods and Techniques - C R Kothari, New Age International, Delhi, 2012

2 An Introduction to Statistical Methods - S P Gupta, Vikas Publishing House, New Delhi, 2004

Reference Books

1 Research in Education - Best J N, Prentice Hall, Delhi, 1979

2 Practical Statistics for the Textile Industry: Part I, G A V Leaf C Text FTI, Published by The Textile Institute, 1984

3 Introduction to Probability and Statistics, Milton J S. and Arnold J C, Tata Mc Graw Hill, New Delhi, 4th Edition, 3rd Reprint, 2008

Journals:

1. Journal of Advanced Research
2. Journal of Scientific Research
3. Journal of Research in Medical Sciences

Course Outcomes	Programme Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	Total
CO1	9	9	9	9	9	9	3	57
CO2	9	9	3	9	3	3	1	37
CO3	9	3	9	9	3	9	3	45
CO4	9	3	1	9	1	1	3	27
CO5	9	1	9	9	1	1	3	33
Total	45	25	31	45	17	23	13	199

Low-1 Medium-3 High-9

Core XI – Computer Application in Pattern Making and Grading Practicals

(For Students Admitted from 2023-24)

Semester: III
Subject Code: IMFDC33P

Hours/week: 6
Credit: 5

Course Objectives:

1. Draft and Grade patterns for various garment styles in computer
2. Prepare Marker Plan for various garment styles in computer

List of Experiments (20 Hours)

1. Draft Patterns, Grade Patterns and Prepare a marker plan for the following Children's Wear

- Yoke frock
- Baba suit
- Summer frock
- Skirt and tops

(30 Hours)

2. Draft Patterns, Grade Patterns and Prepare a marker plan for the following Women's Wear

- Salwar and Kameez
- Blouse and Tops
- Nightie
- Princess line dress

(40 Hours)

3. Draft Patterns, Grade Patterns and Prepare a marker plan for the following Men's Wear

- Kurta and Pyjama
- Shirt with Full sleeve
- T-Shirt and Bermudas
- Pleated trouser
- Bell bottom trouser

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Identify the variety of digital image making techniques, understanding the technical

illustration, pattern manipulation and design layout

CO 2: Apply the pattern, grading and design development to the fashion industry

CO 3: Analyze the pattern grading for children, women and men

CO 4: Illustrate a garment designing children, women's and men's garment

CO 5: Create a different styles of pattern

Text books:

1. StacyStewart Smith, *CAD for Fashion Design and Merchandising Studio Access Card*, BloomsburyUSA Academic Publisher, 2015
2. Jane Alvarado, *Computer Aided Fashion Design Using GerberTechnology*, Bloomsbury Publisher, 2018

References Books:

1. Ruth Huoh, *Fashion Design*, New York Publisher,2017
2. Patrice Free burger George, The Digital Dawn, *Fashion Institute of Technology*, State University of New York Publisher,2020.
3. Joanne Sherrow,*Photoshop and Illustrator for Fashion and Textile Design* , Fairchild Books Publisher, 2015.

Journals:

1. Journal of CAD
2. Journal of CAD Application
3. Journal of CAD Designing

E-Resources:

1. <https://textilelearner.net/computer-aided-fashion-designing/>
2. <https://www.textileblog.com/cad-cam-in-textile-and-garment-industry/>
3. <https://textilelearner.net/application-of-cad-in-textile/>
4. <https://www.onlineclothingstudy.com/2018/10/cad-system-and-its-application-in.html>
5. <https://textilevaluechain.in/in-depth-analysis/5-ways-computer-aided-design-benefits-the-textile- industry/>.

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	1	3	3	3	19
CO 2	3	3	3	3	3	3	3	21
CO 3	3	3	9	3	3	3	3	27
CO4	9	9	1	1	3	9	3	35
CO5	9	9	1	9	9	9	9	55
Total	27	27	17	17	21	27	21	157

Low-1 Medium-3 High-9

Core XII - Internship in Retail Store Outlet/ Boutique Management

(For Students Admitted from 2022-23)

Semester: III
Subject Code: IMFDC34P**Hours /week: 6**
Credit: 5**Course Objectives:**

1. To enable the students to acquire an in depth understanding of the practical aspects of knowledge and skills through internship in clothing industry/fashion institutes/ boutiques/ embroidery /dyeing /printing units in the relevant subject/subjects.
2. It further intends to develop their analytical abilities for situation analysis and to devise means and ways for improvement in the existing system.

Content

1. The students shall be required to undergo an internship for a total duration of 2 weeks in their chosen area of interest/specialization that will facilitate their pursuing a professional career in the same field. They will be assigned the project work to be completed during the break after second semester.
2. The organization/institute (public/private) providing internship facility to students should stand as good professional career support. It may include clothing industry/fashion retailing stores/ boutiques/ embroidery industries /dyeing or printing units etc.
3. The students will be required to submit and present a report of the internship project after completion of the same.
4. Each student shall be attached with one internal faculty member for providing necessary input for the successful completion of the internship project report.
5. The report shall be evaluated out of 100 marks (External-75 marks, Internal-25marks) as per the following criteria.
6. Student shall give a formal presentation of the report before the jury comprising of internal faculty member including internal supervisor.
7. The marks will be awarded by the external examiner to be appointed by the controller of the examination section of the institution

Course Outcomes:

After successful completion of this course, student will be able to

CO1: To learn about the functioning of garment industry working of various department particularly production.**CO2:** Knowledge about different departments of the retail store, their function and information flow during work**CO3:** Analyze the feel of the work environment**CO4:** Demonstrate the various opportunities in the retail outlet**CO5:** Experiment with different styles garment illustrating techniques**Textbooks:**

1. Nada R, Sanders, Supply Chain Management, A Global Perspective, Wiley , Publishing, 2020
2. Michel Chevalier, Michel Gutsatz, Luxury Retail and Digital Management, Wiley Publishing, 2020

Reference books:

- 1.Sarah Bailey, Baker, Visual Merchandising for Fashion, Bloomsbury Publishing, 2021.
- 2.Mary G Wolfe, Fashion Marketing and Merchandising, Good Heard Wilcox Company Publisher, 2018.
- 3.Donna L Bade Export /Import Procedures and Documentation, American Management Association Publisher, 2015.

Journals:

- 1.Journal of Fashion Marketing and Management
- 2.JournalofRetailing
- 3.Journal of Global Fashion Marketing

E- Resources:

1. <https://retailminded.com/introducing-our-featured-boutique-section-she-boutique/#.YevfSNVByUk>
2. <https://www.business.qld.gov.au/industries/manufacturing-retail/retail- wholesale/retail-design/effective-displays/visual-merchandising>
3. <https://www.apm.org.uk/blog/what-is-resource-management/>
- 4.<https://smallbusiness.chron.com/equipment-need-start-clothing-store-10682.html>
- 5.<https://www.netsuite.com/portal/resource/articles/financial-management/financial-management.shtml>

Course Outcomes	Programme Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	Total
CO1	9	9	9	3	9	3	9	51
CO2	9	3	9	3	3	3	3	33
CO3	9	3	9	3	3	3	3	33
CO4	9	3	9	3	9	3	9	45
CO5	9	9	3	3	3	3	9	39
Total	45	27	39	15	27	15	33	201

Low-1 Medium-3 High-9

Discipline Specific Elective III –a. Technical Textile

(For Students Admitted from 2023-24)

Semester: III

Subject Code: IMFDE3A

Hours/week: 6

Credit: 5

Course Objectives:

1. To enable students to study the concept of finishes for various textiles.
2. To gain knowledge regarding automotive, medical, geotextile, agro textiles and protective textiles applications.

Unit I

(18 Hours)

Technical textiles and future: Introduction, definition and scope, technical fabric structure-woven and non-woven with special reference to different types of bonding.

Unit II (18 Hours)

Technical finishes: Introduction to finishing process, mechanical finishes, heat setting, chemical finishes, coating techniques, colouration, heat and flame protection, water proofing, types of water proof breathable fabrics.

Unit III (18 Hours)

Geo textiles and filtration: Geo textiles- Introduction, geo synthesis, essential properties of geo textiles, natural fibre, geo textiles for soil strengthening. Friction resistance of geo textiles and standards for geo textiles. Filtration- Introduction, dust collection, fabric construction, solid liquid separation.

Unit IV (18 Hours)

Medical and automobile textiles: Introduction, fibres used, implantable and non-implantable materials, health care and hygiene properties, textiles for tents, helmets, gloves, survival bags and suits. Automobile textiles - Introduction, textiles in cars, other road vehicles, rail applications, textiles in aircrafts marine application, future prospects.

Unit V (18 Hours)

Agro textiles and Pack Tech: Agro textiles definition, application- in green house cover and fishing nets, nets for plants, rootless plants and protecting grassy areas, sun screens, wind shields and anti birdnets. Pack Tech – definition and scope, types of products - polyolefin woven sacks, FIBC, leno bags, wrapping fabric, Jute sacks, teabags, soft luggage products.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the difference between conventional and technical textiles.

CO2: Understand the requirement and applications of filtration textiles.

CO3: Understand the concept of geo textile, Oeko textiles and home textiles.

CO4: The essential properties and application of medical textiles, protective textiles, and sports textiles

CO5: Understand the sport and industrial applications of textile materials

Text Book:

1. A. Richard Horrocks, Subhash C. Anand, *Handbook of Technical Textiles Technical Textile Processes*, Elsevier Science 2015
2. Roshan Paul, *High Performance Technical Textiles*, Wiley, 2019

Reference Book:

1. Kunal Singha, Pintu Pandit, Subhankar Maity, “*Functional and Technical Textiles*” Elsevier Science, 2023
2. D. Gopalakrishnan, “*Technical Textiles*”, Publisher:Daya Publishing House, 2019
3. T. Matsuo, *Fibre Materials for Advanced Technical Textiles*, Taylor & Francis, 2019

Journals:

1. Textile Research Journal
2. Journal of Textile Association

3. Journal of Textile Engineering

E Resources:

1. <https://www.investindia.gov.in/siru/technical-textiles-future-textiles>
2. <https://textilelearner.net/textile-finishing-process/>
3. <https://www.textileblog.com/geotextiles-types-properties-functions/>
4. <https://textilelearner.net/medical-textiles/>
5. <https://textilelearner.net/agro-textiles-properties-manufacturing-and-applications/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	1	1	3	3	3	3	17
CO 2	3	1	1	1	9	9	3	27
CO 3	3	1	3	3	3	3	3	19
CO4	9	1	1	3	3	3	3	23
CO5	9	1	1	9	3	9	9	41
Total	27	5	7	19	21	27	21	127

Low-1 Medium-3 High-9

Discipline Specific Elective III –b. Dyeing and Printing Technology

(For Students Admitted from 2023-24)

Semester: III

Hours/week: 6

Subject Code: IMFDE3B

Credit: 5

Course Objectives:

1. To gain the knowledge on fiber properties and finishes.
2. To know the difference between dyeing and printing.

Unit I

(18 hours)

Fabric Preparatory Process: Pre-treatment – desizing, scouring and bleaching for cotton, Degumming for silk, carbonizing for wool. Enzymatic pre-treatment processing for cotton, silk and wool.

Unit II

(18 hours)

Recent Trends in Dyeing: Dyeing – meaning and importance. Recent trends – microwave dyeing, super critical dyeing, ultrasonic dyeing, plasma treated dyeing – principle, mechanism and procedure for dyeing.

Unit III

(18 hours)

Basic Finishes: Finishing – purpose and importance – classification of finishing – Temporary finishes–Calendaring, embossing, starching, stiffening , softening. Permanent finishes – sanforising, mercerizing, buckrum finish, anti-crease finish, durable press finish.

Unit IV

(18 hours)

Functional finishes: Anti-microbial – procedure, evaluation and its importance. Anti-bacterial – procedure and its importance. Insect repellent finish – procedure, evaluation and its importance. Flame retardant finish, Fireproof finish, Bullet proof finish, Water repellent finish.

Unit V (18 hours)

Finishing Techniques: Padding Managle – mechanism and procedure, Sonicator techniques – mechanism and procedure, plasma – mechanism and procedure, Nano application – mechanism and procedure, Microencapsulation – mechanism and procedure.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: State the dyeing and printing technology, understand sequence of processing

CO2: Demonstrate the dyes and printing machineries for various industries

CO3: Estimate dyes for types of fabrics

CO4: Knowledge about the advance finishing techniques in dyeing

CO5: Create the fabric samples using dyeing mechanism

Text Books:

1. FaheemUddin, Textile Manufacturing Process, Intech Open Publishing, 2019
2. Sekhri, Seema, Fabric Science, PHI Learning PVT LTD Publisher, 2020

Reference Books:

1. J N Chakraborty, Fundamentals and Practices in Coloration of Textile, WPI India Publisher, 2015.
2. J N Shah, Guide to Wet Textile Processing Machines, Elsevier Science and Technology Publisher, 2015.
3. Subramaniyan Senthilkannan Muthu, Textiles and Clothing Sustainable Textile Chemical Processes, Springer Singapore Publisher, 2016.

Journals:

1. Journal of Dyes and Pigments
2. International Journal of Textile Science Research
3. Journal of Textile Finishing

E-Resources:

1. www.TextileLearner.com
2. www.DyeingWorld.Com
3. <https://study.com/academy/lesson/what-is-textile-finishing.html>
4. <https://www.contrado.co.uk/blog/printing-methods-differences/>
5. <https://textiletuts.com/types-of-dyeing-machines/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	9	3	3	3	9	45
CO 2	3	3	1	1	3	1	3	15
CO 3	9	3	3	9	3	3	9	39
CO 4	3	3	1	3	3	3	3	19

CO5	3	3	9	9	3	3	9	39
Total	27	21	23	25	15	13	33	160

Low-1 Medium-3 High-9

Core XIII – Non-Woven and Nanotechnologies

(For Students Admitted from 2023-24)

Semester: IV

Hours/week: 6

Subject Code: IMFDC41

Credit: 5

Course Objectives:

1. To get knowledge about synthesis of nano materials
2. To know about application in textile finishing

Unit I **(18 hours)**

Non Wovens: Introduction-types- techniques- production. non-woven spun bonding- melt blow process. **Non-woven application** - non-wovens in medical field, home applications, shoes and leather industries, electrical industry. applications as technical textiles in automobiles etc.

Unit II **(18 hours)**

Manufacturing of Non-Wovens: Dry methods-various methods of web preparation (opening, blending and cleaning machines used) technology used in production of parallel, cross-laid and random laid webs, web laying, machines. **WET METHODS:** principles and raw materials, web laying, concept of drift deposition.

Unit III **(18 hours)**

Various methods of bonding web: Mechanical bonding introduction to needle punching, passage of material through needle loom, types of looms – The felting loom, Structuring loom, Random velour loom, Components of needle, needle action, Barb and its important parts kick-up, spacing, angle and depth, needle board arrangement of needle boards.

Unit IV **(18 hours)**

Introduction to Nano Technology: Definition, Basic concepts and scope of nanotechnology, Top down and Bottom up Approaches, Novel properties of Materials at nanoscale. Types of nanoparticles used in textiles. UV protection, antimicrobial, water and oil repellency, Flame-retardancy and electrical conductivity.

Unit V **(18 hours)**

Nanotechnology in Textiles: Areas of nanotechnology in textiles-nanofibers, nanocomposites, smart and multifunctional textiles, Nanoparticles Characterization techniques – SEM, TEM, XRD, AFM, UV-Visible and Electrospinning.

Course Outcomes:

After successful completion of this course, student will be able to

- CO1:** Understand the fiber preparation processes.
CO2: Understand the nonwoven fabric and its techniques.
CO3: Knowledge on various web structures and formation.
CO4: Understand the web bonding processes.
CO5: Understand the advanced non-woven finishing processes.

Text Books:

1. Prabha Karan C., R. Rathinamoorthy, T. Karthik, Process, Structure, Properties and Applications, WPI India, 2017
2. Rembrandt Elise, *Nonwoven Fabric Manufacturing and Applications*, Nova Science Publishers, 2020

Reference Books:

1. Dharani Sabba, *Nanotechnology in Smart Textiles*, Arcler Education Incorporated, 2018
2. Devsuni Singh, Prashansa Sharma, Vivek Dave, *Fundamentals of Nano-Textile Science*, Apple Academic Press, 2022
3. S. J. Russell, *Handbook of Nonwovens*, Elsevier Science, 2022

Journal:

1. Journal for Nonwoven Technology
2. Journal for Mechanics of Non Woven Fabric
3. Journal for Modern Applications of Nano Technology in Textiles

E Resource:

1. https://www.researchgate.net/publication/259118068_Chapter_
2. <https://old.amu.ac.in/emp/studym/100012857.pdf>
3. <https://www.fibre2fashion.com/industry-article/7135/application-of-nanotechnology-in-textile-industry>
4. <https://www.frontiersin.org/articles/10.3389/fnano.2023.1175149/full>
5. <https://www.fibre2fashion.com/industry-article/7135/application-of-nanotechnology-in-textile-industry>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	1	3	3	3	9	37
CO 2	9	3	1	3	3	3	9	31
CO 3	3	3	1	3	3	3	9	25
CO4	9	9	3	9	3	9	9	51
CO5	9	3	1	9	9	9	9	49
Total	39	27	7	27	21	27	45	193

Low-1

Medium-3

High-9

Core XIV - Advanced Costume Designing and Construction Practicals

(For Students Admitted from 2023-24)

Semester: IV**Subject Code: IMFDC42P****Hours/week: 6****Credit: 5****Course Objectives**

1. To know about specific garments that society needs from apparel manufacturer.
2. To understand the consumption of raw materials, costing, lay plan, construction and display techniques in garment making.

Experiments (30 Hours)**Designing and Constructing the Garment****1. Uniform**

- a. School / College
- b. Sports Uniform (any one sports)
- c. Air hostess /Nurses

2. Special Garments (30 Hours)

- a. Garment for an Adaptive person (old age person).
- b. Physically challenged people
- c. Maternity wear.

3. Fashion Costumes in Media (30 Hours)

- a. Periodic (Historical costume)
- b. Traditional
- c. Retro
- d. Western
- e. Haute Couture

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the special needs of the wearer

CO2: Design garment styles for people with special needs

CO3: Create special garments to suit the personal needs of the wearer

CO4: Select fabrics and accessories to suit the garment style and the needs of an individual

CO5: Create custom made garments for special people like pregnant, women, physically

Text Books:

1. Claire Wargnier, Focus on Fashion Details, Volume 1, ESMOD Publishing, 2021
2. Laura Irene Baldt, Clothing for Women, Selection, Design, Construction, Creative Media Partners LLC Publisher, 2018

Reference Books:

1. Gillian Holman, Bias -Cut Dressmaking, Bats ford Publisher, 2015.
2. Annette Fischer, Sewing for Fashion Designers, Quercus Publisher, 2015.
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books Publisher, 2021.

Journals:

1. Journal of Drafting Techniques
2. International Journal of Fashion Design
3. Journal of Pattern Design

E-Resources:

1. <https://sewguide.com/sew-sari-petticoat/>
2. <https://sewguide.com/how-to-sew-skirts/> 3. <https://www.vibhasfashion.com/blouse-cutting-and-stitching>
4. <https://style2designer.com/pattern-cutting-cad-cam/cutting-sewing-techniques/straight-kameez/>
5. <https://sewguide.com/free-tunic-pattern/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	3	1	3	3	3	3	25
CO 2	3	3	3	3	3	3	3	21
CO 3	3	3	1	3	3	3	3	19
CO4	9	9	3	3	3	9	3	39
CO5	9	3	1	9	9	9	3	43
Total	33	21	9	27	21	27	15	147

Low-1

Medium-3

High-9

Core XV- Dissertation

(For Students Admitted from 2023-24)

Semester: IV**Subject Code: IMFDC43PW****Hours/week: 16****Credit: 5****Course Objectives:**

1. To develop skills in conducting a research study/ working project in the area of Textile and Fashion
2. To learn the process of writing a dissertation/ project report

The dissertation is the final stage of the Master's degree and provides an opportunity to gain the necessary skills and knowledge in research project. It should demonstrate that students are skilled in area of research, setting research objectives, authoritative literature, devising an appropriate research methodology, analysing the data, conclusions and if appropriate making relevant recommendations and indications of areas for further research.

The students will be guided and supervised by the teaching faculty of the Fashion Designing department. After completing the dissertation, the report will be submitted for external evaluation. The students will have to appear for viva-voce for their thesis after the valuation by the external examiner

Course Outcomes	Programme Outcomes							Total
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
CO1	9	9	9	9	9	9	9	63
CO2	9	9	9	9	9	9	9	63
CO3	9	9	9	9	9	9	9	63
CO4	9	9	9	9	9	9	9	63

CO5	9	9	9	9	9	9	9	63
Total	45	45	45	45	45	45	45	315

Low-1

Medium-3

High-9

Extra Credit – Eco Textiles

(For Students Admitted from 2023-24)

Semester: IV

Subject Code: IMFDX4

Credit: 2

Course Objectives:

1. To gain knowledge about the environmental issues in textile industry
2. To understand the concept of eco-friendly textiles

Unit I

Eco- Friendly Fibers: Introduction, Scope, Classification of eco-friendly textiles fibers: Natural and Regenerated fibres.

Unit II

Extraction of natural fibers: Introduction, Classification of retting: Mechanical, running water, pool retting, dew retting and stagnant retting. Yarn making and fabrication, nonwoven. Practical- Extraction of minor natural fibers.

Unit III

Eco -Friendly processing: Introduction, Scope and Types of enzymes, Enzymes used in textile processing: desizing, degumming, scouring, bleaching, mercerizing, denim fading. Practical- Desizing and degumming using enzymes.

Unit IV

Eco-Friendly dyes and Chemicals: Need for Eco Friendly Processing, Natural dyes and mordants: Source- root, bark, wood, leaf, flowers, seed, rind, Bio-mordant: selection and application. Merits of eco-friendly processing over their conventional counter parts. Practical- Preparation of two natural dyes.

Unit V

Eco Friendly effluent treatment and Eco standards: Effluent treatment methods: Primary, Secondary and Tertiary. Bioremediation, Phyto- remediation. Eco Labeling and Eco Mark: Sources of effluent generation in textile processing. Need and Scope of Eco label.

Course Outcomes:

After successful completion of the course, the student will be able to

CO1: Improve their ability to creative ideas in research and development to make Eco textiles.

CO 2: Execute environmentally friendly textile manufacturing in working place.

CO 3: Describe the need for Eco textiles and fashion

CO 4: Select Natural Textile design and processing methods

CO 5: Manufacture sustainable textile products for all types of customer needs.

Text books:

1. Mohd Shabbir, Textiles and Clothing Environmental Concerns and Solutions Wiley, 2019
2. Kunal Singha, Pintu Pandit, Sanjay Shrivastava, Shakeel Ahmed, Recycling from Waste in Fashion and Textiles A Sustainable and Circular Economic Approach, Wiley, 2020

Reference books:

1. Chaudhery Mustansar Hussain, Nabil Ibrahim, Green Chemistry for Sustainable Textiles Modern Design and Approaches, Elsevier Science, 2021
2. Miguel Angel Gardetti, Subramanian Senthilkannan Muthu, Sustainability in the Textile and Apparel Industries, Springer International Publishing, 2020
3. Rajkishore Nayak, Sustainable Fibres for Fashion and Textile Manufacturing Elsevier Science, 2022

Journal:

1. International Journal of Sustainable Fashion & Textiles
2. International Journal of Science Technology & Management
3. Journal of Textile and Apparel

E Resource:

1. <https://www.fibre2fashion.com/industry-article/76/eco-friendly-textiles>
2. https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SFDA1103.pdf
3. <https://www.fibre2fashion.com/industry-article/6989/use-of-enzymes-in-textile-wet-processing>
4. https://www.academia.edu/36351120/Eco_friendly_dyes_and_dyeing
5. <https://www.fibre2fashion.com/industry-article/5513/textile-effluent-treatment-an-ecofriendly-approach>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	9	9	9	3	3	1	9	43
CO 2	9	1	1	3	9	1	3	27
CO 3	3	1	1	3	3	1	1	13
CO4	3	1	1	3	3	1	1	13
CO5	9	3	3	3	3	3	3	27
Total	33	15	15	15	21	7	17	123
	Low-1		Medium-3			High-9		

B.Sc. FASHION DESIGNING
[Three-Year Regular Programme]
(For Students Admitted from 2023-2024)

Programme Specific Outcomes:

On completion of the Under Graduate Degree Programme, student will be able to gain

PSO1: Create strong foundation in designing and have the ability to visually represent it by illustrations, photographs, graphics and visual display of merchandise.

PSO2: Apply the different methods of garment construction and create Apparel designing techniques

PSO3: Creating exposure by learning and designing trends through become an energetic entrepreneur to run own business

PSO4: Educate and practiced in all aspects of the designing process. Throughout their experience, students produce original designs and develop collections for their portfolio

PSO5: Apply to consumer design emphasis track as relevant, creative professionals prepared for the future direction and current trends of this exciting field

PSO6: Choosing Fashion designing employment areas are Design studio, Boutique house, Dyeing and Printing factories, Apparel Export houses, Jewelry houses, Fashion trend sector, Merchandising firms, Media, Research and development firms, Retail/stores, Textile processing mill

PSO7: Good job opportunities with government sponsored, TRB-Sewing Special Teacher. Handloom, Silk Board, Khadi, Jute and Craft development organizations.

PROGRAMME CODE: UFD
PROGRAMME STRUCTURE

Sem	Subject Code	Part	Course	Subject Title	Hours /Week	Credit	CIA	ESE	Total Marks
I	IBLT11 IBLA11 IBLH11	I	Language I	Tamil I/Basic Arabic-I /Hindi-I	5	3	25	75	100
	IBLT11 IBLA11 IBLH11	II	Language II	English I a or b	5	3	25	75	100
	IBFDC111	III	Core I	Basic Garment Construction	6	5	25	75	100
	IBFDC121P	III	Core II	Basic Garment Construction Practicals	5	4	25	75	100
	IBFDA13P	III	AECC-I	Fashion Illustration I Practicals	5	4	25	75	100
	IBFDS14	IV	SEC-I	Fiber to Yarn	2	2		50	50
			Library/Browsing	1					
			Remedial/ Games	1					
			Total		30	21	125	425	550
II	IBLT21 IBLA21 IBLH21	I	Language I	Tamil II/ Basic Arabic-II /Hindi-II	5	3	25	75	100
	IBLEI22/ IBLEII22	II	Language II	English II a or b	5	3	25	75	100
	IBFDC211	III	Core III	Pattern Making and Grading	5	5	25	75	100
	IBFDC221P		Core IV	Pattern Making Practicals	4	4	25	75	100
	IBFDA23P		AECC-II	Fashion Illustration – II Practicals	5	4	25	75	100
	IBFDS24	IV	SEC-II	History of Fashion and Traditional Design	2	2	-	50	50
	IBES2	IV	GIC-I	Environmental Science	2	2	-	50	50

	IBFDX2P	-	Extra Credit	Fashion Accessory Designing Practicals	-	2	-	100	100
				Library/Browsing	1				
				Remedial/ Games	1				
				Total	30	23+2	125	475+100	600+100
III	IBLT31 IBLA31 IBLH31	I	Language I	Tamil III/Basic Arabic III/ Hindi - III	5	3	25	75	100
	IBLEI32/ IBLEII32	II	Language II	English III a or b	5	3	25	75	100
	IBFDC31	III	Core V	● Integrated Course- Fashion Studies	4	4	25	75	100
	IBFDC32P		Core VI	Construction for Children s Apparel Practicals	4	4	25	75	100
	IBFDA33I		AECC I	# Boutique Internship	4	4	25	75	100
			OEC	-	2	2	-	50	50
	IBFDS34	IV	SEC-III	Draping Techniques in Fashion Practicals	2	2	-	50	50
			GIC-II	Human Rights	2	2	-	50	50
	IBHR3	V	Extension Activities	NSS / CSS	2	2	100	-	100
	IBFDX3/ IBFDX30		Extra Credit	Clothing Care and Maintenance/*Online Course (Advanced Textile Printing Technology-NPTEL)	-	2	-	100	100
				Total	30	26+2	225	525+100	750+100
IV	IBLT41 IBLA41 IBLH41	I	Language I	Tamil IV / Basic Arabic III /Hindi-IV	5	3	25	75	100
	IBLEI42/ IBLEII41	II	Language II	English IV a or b	5	3	25	75	100
	IBFDC411	III	Core VII	Wet Processing	4	4	25	75	100
	IBFDC421P		Core VIII	Wet Processing Practicals	5	4	25	75	100

	IBFDA43P		AECC-II	Construction for Women's Apparel Practicals	5	4	25	75	100
		IV	OEC	-	2	2	-	50	50
	IBFDS44P	IV	SEC-IV	Surface Embellishment practicals	2	2	-	50	50
	IBLVE4		GIC-III	Life skills and Value Education	2	2	-	50	50
	IBFDX4P/ IBFDX4O		Extra Credit	Internship in Textile Processing- Manufacturing Unit/*Online Course(Basic of Pattern Making and Sewing - Swayam)	-	2	-	100	100
				Total	30	24+2	125	525+100	650+100
V	IBFDC511	III	Core IX	Fabric Structure and Design	4	3	25	75	100
	IBFDC521P		Core X	Fabric Structure and Design Practicals	5	4	25	75	100
	IBFDC53P		Core XI	Construction for Men' Apparel Practicals	5	5	25	75	100
	IBFDC54P		Core XII	Computer Aided Designing (CAD) – I Practicals	4	3	25	75	100
	IBFDE5A/ IBFDE5B		DSE -I	a. Fashion Merchandising and Marketing b. Apparel Business Accounting	4	4	25	75	100
	IBFDE5C/ IBFDE5D		DSE- II	a. Apparel Quality Control b. Apparel Production Management	4	4	25	75	100
	IBFDS55P		IV	SEC-V	• Integrated Course - Boutique Management	2	2	-	50
	IBWE5	GIC- IV		Women Entrepreneurship		2		50	50
	IBESX5/	-	Extra Credit	Employability Skills/*Online Course (Basics of Event Management-Swayam)	-	2	125		100
				Total	30	27+2	150+125	550	700+100

VI	IBFDC61	III	Core XIII	Fashion Retailing and Research	5	5	40	60	100
	IBFDC62		Core XIV	Textile Testing	4	2	25	75	100
	IBFDC63P		Core XV	Computer-Aided Design (CAD)Practicals-II	4	2	25	75	100
	IBFDC64P		Core XVI	Fashion Portfolio Presentation Project	5	5	25	75	100
	IBFDC65		Core XVII	• Integrated Course- Fashion Photography and Modelling (Theory cum Practicals)	5	4	25	75	100
	IBFDE6A/ IBFDE6B		DSE-III	a. Fashion Communication /b. Event Design Management	4	4	25	75	100
	IBFDS66P	IV	SEC-VI	Fashion Styling Practicals	2	2	-	50	50
	IBFDX6W/ IBFDX6O		ExtraCredit	Mini Project / *Online Course (Textile & Quality Analysis-Swayam)	-	2	-	100	100
				Library/Browsing	1		-	-	-
				TOTAL	30	24+2	165	485+100	650+100
				GRANDTOTAL	180	145+10	815+225	2985+400	3900+500

AECC-Ability Enhancement Compulsory Course
DSE-Discipline Specific Elective

SEC-Skill Enhancement Course
OEC-Open Elective Course

*For online certification credit alone will be assigned on submission of certificate obtained through appearing for online examination from Swayam, Spoken tutorial, EDX, NPTEL etc.

Internship

• Integrated Course

Core I – Basic Garments Construction

(For Students Admitted from 2023 -24)

Semester: I**Subject Code: IBFDC111****Hours /Week: 6****Credit: 5****Course Objectives:**

1. To know about the sewing machine parts and functions
2. To enable students to know various types of seams, seam finishes, plackets, pockets, neckline, sleeves and collars

Unit I**(18 hours)**

Introduction to Sewing Machine: Parts and functions of a single needle lock stitch & double needle lock stitch machine, classification of sewing machine- flat lock machine, over lock machine – types – special attachments. Special machines -fashion maker, button & buttonhole machine, blind stitching machine, embroidery machines, faggoting machine. Problems in sewing machines - essential tools- cutting tools, measuring tools, marking tools, general tools, pressing tools.

Unit II**(18 hours)**

Seams and Seam finishes: Introduction to seams and seam finishes-types-plain, flat fell, french, piped seam, topstitched, overcast, hem, edge stitched, bound. Introduction to neckline finishes, types-bias facing, bound, facing and decorative facing. Introduction to binding, types- single bias binding, double bias binding.

Unit III**(18 hours)**

Fullness and Yokes: Introduction to fullness, types- darts, tucks -pin, cross, group tucking with scalloped effect. Introduction to pleats, types-knife, box, kick, cartridge, gathering by machine, elastic. Introduction to ruffles, types- single, double, flares and godets, gathers, shirrs and flounces. Introduction to yoke, types-simple yoke, yoke supporting fullness.

Unit IV**(18 hours)**

Plackets and Fasteners: Introduction to plackets-characteristics of a good placket, types-inconspicuous placket and conspicuous plackets. Method of construction. Introduction to fasteners-conspicuous (Button and buttonholes, button loops, button with holes, shank buttons, eyelets and cords). Inconspicuous (press buttons, hooks and eyes, zips).

Unit V**(18 hours)**

Sleeves, Collars and Pockets: Sleeves-types modified armhole-squared, armhole. Cap sleeve and Magyar sleeve. Introduction to collar, types- peter pan – scalloped – square – full shirt collar– open collar – Chinese collar – shawl collar. Introduction to pockets- types –patch, bound, pocket in a seam, single or double lip pocket.

Course Outcomes:

After successful completion of this course, students will be able to

CO 1: State the functions of sewing machines and identify the parts

CO 2: Apply the finishing method to the fabric

CO 3: Analyze the basic types of sleeves, collar and pockets.

CO 4: Experiment the components of apparel designing

CO 5: Create different finishes and its applications

Text Books:

1. Chloe Russell, Fundamentals of Apparel Design, Independently Publisher, 2021.
2. Jennifer Lynne Matthews, Pattern Design: Fundamentals, Fair banks Publisher, 2018.

Reference Books:

1. Dweep Jyot Singh, JohnDavidSon, Teach Yourself Stitch Craft and Dressmaking Volume V, MendonCottage Books Publisher, 2016.
2. T Karthik, P Ganesan, D Gopalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016.
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books SL Publisher, 2021.

Journals:

1. Journal of Clothing and Textile
2. Journal of Designing Apparel For Consumers
3. Journal of Textile Design

E- Resources:

1. <https://www.bloomsbury.com/uk/the-fundamentals-of-fashion-design-9782940373390/>
2. https://www.brainkart.com/article/Seam-Finishes-and-Types-of-Seam-Finishing_35626/
3. <http://textilelearner.blogspot.com/2014/11/the-basic-fundamentals-of-apparel.html>
4. <https://www.britannica.com/>
5. <https://www.kresent.com/types-of-collars/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	3	1	3	3	3	3	25
CO 2	3	3	3	3	3	3	3	21
CO 3	3	3	1	3	3	3	3	19
CO4	9	9	3	3	3	9	3	39
CO5	9	3	1	9	9	9	3	43
Total	33	21	9	27	21	27	15	147

Low-1

Medium-3

High-9

Core II – Basic Garment Construction Practicals

(For Students Admitted from 2023-24)

Semester: I**Subject Code: IBFDC121P****Hours /Week: 5****Credit: 5****Course Objectives:**

1. To know about the Sewing machine and Techniques
2. To enable students to know various types of seams, seam finishes, plackets, pockets, neckline, sleeves and collars

List of Experiments:

1. Seam-Plain, Flat fell, French, Piped seam, Top stitched,
2. Seam finishes-Top Stitched, overcast, hem, edge stitched, bound.
3. Neckline finishes-bias facing, bound facing and decorative facing.
4. Binding-single bias binding, double bias binding.
5. Fullness-darts, tucks-pin, cross, group tucking with a scalloped effect
6. Pleats-knife, box, kick, cartridge, gathering by machine, elastic
7. Ruffles-single, double, flares and godets, gathers and shirrs flounces.
8. Yoke-Simple yoke, yoke supporting fullness.
9. Sleeve- set-in-sleeves-plain sleeve, puff sleeve, bishop sleeve, bell, circular, raglan, kimono.
10. Collar – Peter pan, scalloped, square, full shirt collar, open collar, Chinese collar, Shawl collar.
11. Pockets- patch, bound, pocket in a seam, single or double lip pocket.
12. Plackets-continuous, bound, faced and zipper plackets, Tailored Placket
13. Fasteners- button and buttonhole, Press button, hook and eye, Zips

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: State the functions of sewing machines and identify the parts**CO 2:** Apply the finishing method to the fabric**CO 3:** Analyze the basic types of sleeves, collar and pockets.**CO 4:** Experiment the components of apparel designing**CO 5:** Create different finishes and its applications**Text Books:**

1. Chloe Russell, Fundamentals of Apparel Design, Independently Publisher, 2021.
2. Jennifer Lynne Matthews, Pattern Design: Fundamentals, Fair banks Publisher, 2018.

Reference Books:

1. Dweep Jyot Singh, John DavidSon, Teach Yourself Stitch Craft and Dressmaking Volume V, Mendon Cottage Books Publisher, 2016.
2. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016.
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books SL Publisher, 2021.

Journals:

1. Journal of Clothing and Textile
2. Journal of Designing Apparel for Consumers
3. Journal of Textile Design

E- Resources:

1. <https://www.bloomsbury.com/uk/the-fundamentals-of-fashion-design-9782940373390/>
2. https://www.brainkart.com/article/Seam-Finishes-and-Types-of-Seam-Finishing_35626/
3. <http://textilelearner.blogspot.com/2014/11/the-basic-fundamentals-of-apparel.html>
4. <https://www.britannica.com/>
5. <https://www.kresent.com/types-of-collars/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	3	1	3	3	3	3	25
CO 2	3	3	3	3	3	3	3	21
CO 3	3	3	1	3	3	3	3	19
CO4	9	9	3	3	3	9	3	39
CO5	9	3	1	9	9	9	3	43
Total	33	21	9	27	21	27	15	147

Low-1 Medium-3 High-9

Ability Enhancement Compulsory Course –I
Fashion Illustration I – Practicals

(For Students Admitted from 2023-24)

Semester: I
Subject Code: IBFDA13P

Hours/ Week: 5
Credit: 4

Course Objectives:

1. To study the fundamentals of color theory, the basic figure illustration and shading techniques
2. To impart practical knowledge in sketching facial features and head theories

List of Experiments:

1. Lines and line drawings –object drawing and perspective view drawings (5 hours)
2. Enlarging and reducing motifs (10 hours)
3. **Prepare different presentation of fashion illustration** (10 hours)
 - a. Water colour
 - b. Poster colour
 - c. Colour pencil
 - d. Collage work
4. **Prepare the Illustrations for the following:-** (10 hours)
 - a. Head theory– 8 ½ , 10½ , and 12
 - b. Stick figure
 - c. Block Figure
 - d. Flesh Figure
5. **Draw classic and innovative features of costume designs** (15 hours)
 - a. Bodice – symmetric/ Asymmetric
 - b. Collars
 - c. Necklines
 - d. Pockets
 - e. Sleeves, Cuffs
 - f. Skirts
 - g. Trousers
6. Practicing the art of creating textures. (5 hours)
7. Illustrating different types of ornaments and accessories. (10 hours)
8. Illustrating details of ruffles, cowls, shirring, smocking, quilting, gathers, pleats, frills and flounces. (10hours)

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Understand the basic fashion sketching and classify the various head theories

CO 2: Illustrate the different texture and designs

CO 3: Draw the different styles of garment designing

CO 4: Experiment the coloring techniques- pencil drawing, posters, watercolors

CO 5: Develop the own individual styles

Text Books:

1. Kathryn Hagen, Fashion Illustration for Designers, Second Edition, Wavell and Publisher, 2017.
2. Irina Ivanovo, Haute Couture Fashion Illustration, Art Design Project, Incorporated Publisher, 2018.

Reference Books:

1. Michele Wesen Bryant, Fashion Drawing, Second Edition, Laurence King Publisher, 2016.
2. Julius Wiede mann, Illustration Now Fashion, Taschen Publisher, 2017.
3. Anna Kiper, Fashion Illustration Inspiration and Techniques, David & Charles Publisher, 2016.

Journals:

1. Journal of Illustration
2. Journal of Illustration Solutions
3. Journal of design

E-Resources:

1. https://en.wikipedia.org/wiki/Fashion_illustration
2. <https://www.iskn.co/fashion-illustration-basics/>
3. <http://www.vogue.co.uk/gallery/fashion-illustration>
4. <http://www.purfe.com.au/top-5-fashion-illustration-books/>
5. <http://sewguide.com/> gather and frills

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	3	3	3	3	21
CO 2	3	1	3	3	3	9	3	25
CO 3	3	3	3	3	9	9	3	33
CO4	3	3	3	1	3	3	9	25
CO5	3	3	9	9	3	9	9	45
Total	15	13	21	19	21	33	27	149

Low-1 Medium-3 High-9

Core III – Pattern Making and Grading

(For Students Admitted from 2023-24)

Semester: II**Hours /Week: 5****Subject Code: IBFDC211****Credit: 5****Course Objectives:**

1. To develop knowledge of basic information about pattern making
2. To study the basic methods of pattern alteration and fitting

Unit I**(15 hours)**

Body Measurement: Importance, preparation for measuring, women measurements, children and men's measurements. Standardizing body measurements – importance, techniques used. Preparation of fabric for cutting – Importance of grain in cutting and construction.

Unit II**(15 hours)**

Pattern making: Methods of pattern making, drafting and draping merits and demerits – types of paper patterns, patterns for personal measurements and commercial patterns – principles of pattern drafting – pattern details – steps in drafting basic bodice front and back and sleeve.

Unit III**(15 hours)**

Pattern Alteration: Methods of identifying pattern alteration. General principles for pattern alteration. Common pattern alteration in a fitted bodice pattern. Garment fitting and assembling standards for a good fit, checking for good fit, solving fitting problems and remedies.

Unit IV (15 hours)

Pattern Layout: Definition, purpose, rules in layout, types of layouts for lengthwise striped designs, fabric with bold design, asymmetric designs, and one way designs. What can be done if cloth is insufficient, fabric cutting, transferring pattern marking, stay stitching, ease stitching.

Unit V (15hours)

Commercial Pattern and Pattern Grading: Commercial pattern: Definition, merits and demerits, Development of commercial pattern. Pattern grading: Definition, Grading terminology, selecting a grading system, grading techniques, advantages and disadvantages. Computer grading, grading procedures. Grading of basic blocks using draft grading systems.

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Understand the basics of pattern making and list out the types of pattern

CO 2: Illustrate the designs and selection of pattern making principles

CO 3: Assess the basic pattern sets using pattern making techniques

CO 4: Examine the garment fitting, alteration methodologies and assembling techniques

CO 5: Develop creative designs through draping, drafting, flat pattern method

Text Books:

1. Mae Gallagher, Pattern Fitting, Independently Publisher, 2020
2. Jennifer Lynne Matthews, Pattern Design: Fundamentals, Fairbanks Publisher, 2018

Reference Books:

1. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016
2. Dweep Jyot Singh, John David Son, Teach Yourself Stitch Craft and Dress making Volume V, Mendon Cottage Books Publisher, 2016
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books SL Publisher, 2021

Journals:

1. Journal of International Research and Method of Education
2. Journal of Education Technology
3. Journal of Optimized Pattern Grading

E - Resources:

1. [https://en.wikipedia.org/wiki/Pattern_\(sewing\)](https://en.wikipedia.org/wiki/Pattern_(sewing))
2. http://dget.nic.in/upload/uploadfiles/files/Sewing_Technology_CTS.pdf
3. http://fashiondegreelink.com/introduction-pattern-drafting#formPage_1
4. <http://www.fibre2fashion.com/industry-article/5658/basics-of-pattern-making>
5. <https://www.clothingpatterns101.com/pattern-grading.html>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	1	3	3	3	19
CO 2	3	3	3	3	3	3	3	21

CO 3	3	3	9	3	3	3	3	27
CO4	9	9	1	1	3	9	3	35
CO5	9	9	1	9	9	9	9	55
Total	27	27	17	17	21	27	21	157
	Low-1		Medium-3		High-9			

Core IV - Pattern Making Practicals

(For Students Admitted from 2023-24)

Semester: II

Hours /Week: 4

Subject Code: IBFDC221P

Credit: 4

Course Objectives:

1. To create individual patterns for children, women and men.
2. To impart practical knowledge in developing patterns for various garments styles

List of Experiments:

I. Design, Draft and create patterns for the following children's garments (15 hours)

- a. Bib
- b. Panty
- c. Jabla
- d. Baba Suit
- e. A-line petticoat
- f. Frock

II. Design, Draft and create patterns for the following Women's garments (30 hours)

- a. Saree petticoat
- b. Camisole
- c. Tunic top
- d. Skirt
- e. Salwar-Kameez
- g. Nighty/Night dresses

III. Design, Draft and create patterns for the following men's garments (30 hours)

- a. Knicker
- b. Shorts
- c. Bermuda
- d. Shirt
- e. Trouser
- f. Kurta, Pyjama

Text Books:

1. Mae Gallagher, Pattern Fitting, Independently Publisher, 2020
2. Jennifer Lynne Matthews, Pattern Design: Fundamentals, Fairbanks Publisher, 2018

Reference Books:

1. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016
2. D Deep Jyot Singh, John David Son, Teach Yourself Stitch Craft and Dress making Volume V, Mendon Cottage Books Publisher, 2016
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books SL Publisher, 2021

Journals:

4. Journal of International Research and Method of Education
5. Journal of Education Technology
6. Journal of Optimized Pattern Grading

E - Resources:

1. [https://en.wikipedia.org/wiki/Pattern_\(sewing\)](https://en.wikipedia.org/wiki/Pattern_(sewing))
2. http://dget.nic.in/upload/uploadfiles/files/Sewing_Technology_CTS.pdf
3. http://fashiondegreelink.com/introduction-pattern-drafting#formPage_1
4. <http://www.fibre2fashion.com/industry-article/5658/basics-of-pattern-making>
5. <https://www.clothingpatterns101.com/pattern-grading.html>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	1	3	3	3	19
CO 2	3	3	3	3	3	3	3	21
CO 3	3	3	9	3	3	3	3	27
CO4	9	9	1	1	3	9	3	35
CO5	9	9	1	9	9	9	9	55
Total	27	27	17	17	21	27	21	157

Low-1

Medium-3

High-9

**Ability Enhancement Compulsory Course II –
Fashion Illustration II Practicals**

(For Students Admitted from 2023-24)

Semester: II**Subject Code: IBFDA23P****Hours /Week: 5****Credit: 4****Course Objectives:**

1. To equip the students with sketching skills in fashion accessories
2. To impart practical knowledge in illustrating a concept of inspiration for various garments styles

List of Experiments:

1. Concept of fashion drawing using with Elements and principles (4 hours)
2. Drawing of Movement figures- legs & hands (8 hours)
3. Drawing of Bone Structure (4 hours)
4. Drawing of Muscle view (4 hours)
5. Drawing of Front view (8 hours)
6. Drawing of Side view (8 hours)

7. Drawing of Back pose	(8 hours)
8. Drawing of Structure of hands, legs & foot	(4 hours)
9. Drawing the face & Facial proportion	(8 hours)
10. Drawing of different hair Styles	(4 hours)

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Recall the different styles of illustration the classifying with accessories

CO 2: Sketch the movement of fashion figures

CO 3: Analyze the various proportions

CO 4: Develop skills in the field of drawing

CO 5: Create the trendy fashion figures

Text Books:

1. Kathryn Hagen, Fashion Illustration for Designers, Press Publisher, Second Edition, 2017.
2. Irina Ivanovo, Haute Couture Fashion Illustration, Art Design Project, Incorporated Publisher, 2016.

Reference Books:

1. Michele Wesen Bryant, Fashion Drawing, Second Edition, Laurence King Publisher, 2016.
2. Julius Wiedemann, Illustration Now Fashion, Taschen Publisher, 2017.
3. Anna Kiper, Fashion Illustration Inspiration and Techniques, David & Charles Publisher, 2016.

Journals:

1. Journal of Illustration
2. Journal of Illustration Solutions
3. Journal of design

E-Resources:

1. https://en.wikipedia.org/wiki/Fashion_illustration
2. <https://www.iskn.co/fashion-illustration-basics/>
3. <http://www.vogue.co.uk/gallery/fashion-illustration>
4. <http://www.purfe.com.au/top-5-fashion-illustration-books/>
5. <https://www.shutterstock.com/search/women+hair+style+illustration>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	1	3	3	3	9	37
CO 2	9	3	1	3	3	3	9	31
CO 3	3	3	1	3	3	3	9	25
CO4	9	9	3	9	3	9	9	51
CO5	9	3	1	9	9	9	9	49
Total	39	27	7	27	21	27	45	193

Low-1

Medium-3

High-9

Extra Credit – Fashion Accessory Designing Practicals
(For Students Admitted from 2022-23)

Semester: II

Subject Code: IBFDX2P

Credit: 2

Course Objectives:

1. To impart knowledge on accessories and ornamentation
2. To develop skills in the field of designing in different styles

List of Experiments:

Prepare the following Accessories using the available raw materials / anybase material in Traditional, Retro, Ethnic and Fusion styles.

1. Hand bags–4 varieties
2. Purses/ Wallets / Cell Phone covers -. 4 varieties
3. Chains I Necklaces - 5 varieties
4. Bangles / Bracelets / Watches - 5 varieties
5. Hats/caps- 5 varieties
6. Ear rings/Hair band - 5 varieties
7. Finger rings / toerings- 5 varieties
8. Belts- 5 varieties
9. Gloves – 3 varieties
10. Mask – 5 Varieties

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the fashion accessories; identify the recent trends and product development

CO2: Experiment motif based on different hand knitting methods

CO3: Prepare the accessories by refashioning fabrics

CO4: Develop the various styles of fashion accessories

CO5: Create innovative accessory designs

Text Books:

1. John Lau, Basics Fashion Design 09: Designing Accessories, Bloomsbury Publisher, 2021
2. Sarah Bellerose, Jewelry, Create Space Independent Publisher, 2017

Reference Book:

1. Gianni Pucci, Hats and Caps: Fashion Accessory Design, Promo Press Publisher, 2018.
2. Courtney Legenhausen, Fashion Jewelry, Lark Books Publisher, 2017.
3. Gitte Blass, Making Your Own Accessories and Jewelry, Dorrance Publishing Company, 2017.

Journals:

1. Journal of Accessory Design
2. Journal of Designing
3. Journal of Fashion Designing

E- Resources:

1. <https://www.thesewingdirectory.co.uk/bag-making/>
2. <https://www.craftscouncil.org.uk/learning/craft-careers/how-become-chain-maker>
3. <https://www.diys.com/bangle-designs/>
4. <https://www.craftionary.net/caps-hats-for-women-diy/>
5. <https://www.goldbarkleather.com/sourceblog/diy-belt-guide>

Course Outcomes	Programme Outcomes							Total
	PO1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	9	3	3	3	9	45
CO 2	3	1	1	3	9	3	3	23
CO 3	9	9	9	9	3	3	3	45
CO4	3	3	1	1	3	3	9	23
CO5	9	3	3	3	1	3	9	28
Total	27	19	14	19	16	12	24	164

Low-1

Medium-3

High-9

Core V -Fashion Studies

(For Students Admitted from 2023-24)

Semester: III**Subject Code: IBFDC211****Hours/Week: 4****Credit: 4****Course Objectives:**

1. To learn about the fashion terminologies
2. To understand the fundamentals of design elements & principles

Unit I**(12 hours)**

Introduction to Fashion: Definition, Importance and designs-Principles, Elements. Terminologies of fashion, Nature of fashion, Myths about fashion, Fashion concepts in different regions, Leaders of fashion.

Unit II**(12 hours)**

Environment of Fashion: History of fashion, Adoption of fashion-trickle up, Trickle down & Trickle across theory, cultural value. Evaluation, Revolution of fashion- Vertical, Horizontal concepts, Environment of fashion, Factors influencing fashion- Psychological needs of fashion, Socio psychology of fashion, Technological, Political, Legal and seasonal influence.

Unit III**(12 hours)**

Fashion Psychology: Principles of fashion psychology - Fashion cycle, Movement of fashion, Role of costume as a status symbol, Costume as personality and sex appeal, Diffusion of fashion line, Historic costumes and evaluation of Indian costumes.

Unit IV (12 hours)

Figure Variations: Designing dresses for unusual figures-becoming and unbecoming- figure types-stout figure-thin figure(zero size)-slender figure-narrow shoulders-broad shoulders-round shoulders – large bust- flat chest-large hip-large abdomen-round face-small face-prominent chin and jaw- prominent forehead.

Unit V (12 hours)

Colour Theory: Colour-definition-colour theories-prang colour chart and Mansell colour system- dimensions of colour-hue -value-intensity- color psychology -standard colour harmonies-application in dress design-colour in principles of design-application of the same in dress design.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify the meaning of fashion, understanding the fashion studies

CO2: Discover the current trends in fashion

CO3: Apply the fashion elements and design principles

CO4: Investigate fashion psychology and evaluation

CO5: Create a new design implementation of fashion

Text Books:

- 1.HollyM. Kent,Teaching Fashion Studies, BloomsburyPublishing,2018
- 2.Elizabeth Wissinger, Eugenia Paulicelli, Veronica Manlow, The Routledge Companion to Fashion Studies, Taylor & Francis Publisher,

Reference Books:

1. Angela Nurse, Damayanthie Eluwawalage, Laura Petican, Mariam Esseghaier, New Developments in Fashion Studies”, Brill Publishing, 2019.
2. Carolyn Mair, the Psychology of Fashion, Taylor and Francis Publisher, 2018.
3. Heike Jense, Fashion Studies Research Methods, Blooms bury Publishing, 2016.

Journals:

1. Journal of Fashion Marketing and Management
2. Journal of Fashion Studies
3. Journal of Color Tech

E-Resources:

1. www.vogue.com
2. www.businessoffashion.com
3. <https://worlduniversityofdesign.ac.in/b-des-fashion-design.php?gclid>
4. <https://99designs.com/blog/tips/the-7-step-guide-to-understanding-color-theory/>
5. <https://www.michaelsolomon.com/fashion-psychology/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	9	3	3	3	25
CO 2	3	3	3	9	3	3	3	27
CO 3	3	3	9	3	3	9	9	39

CO4	3	9	9	9	3	9	9	51
CO5	9	3	3	9	3	9	9	45
Total	21	21	25	39	15	33	33	186

Low-1

Medium-3

High-9

CORE VI - Construction for Children's Apparel Practicals

(For Students Admitted from 2032-24)

Semester: III

Subject Code: IBFDC32P

Hours/Week: 5

Credit: 4

Course Objectives:

1. To impart knowledge on designing garments for kids
2. To enable the students to practice skills in drafting, pattern making and construction of selected garment and calculating cost of product

List of Experiments:

Designing, drafting and constructing the following garments for the features prescribed list the Measurements required and Materials suitable Calculate the cost of the garment calculate the material required –Layout method and direct measurements method.

1. Bib- Variation in outline shape (5 hours)
2. Panty-plain or plastic lined panty (5 hours)
3. Jabla- without sleeve, front open or Magyar sleeve, back opens (5 hours)
4. Baba suit- knicker with chest piece attached or Romper (5 hours)
5. A-Line petticoat- double pointed dart, neckline and armhole finished with facing/ petticoat with gathered waist (5 hours)
6. School Uniforms – Boy's and Girl's (10 hours)
7. Summer frock- with suspenders at shoulder line, without sleeve/collars Angel top with raglan sleeve, fullness at neckline (5 hours)
8. Yoke frock- yoke at chest line, with open, puff sleeve, gathered skirt frock- with collar, without sleeve, gathered/ circular skirt at waist line or Princess line frock (10 hours)
9. Knicker- elastic waist, side pockets. (5 hours)
10. Shirt- open collar, with pocket (10 hours)
11. Boy's short – fly open with buttons, side pocket, pleats and dart. (10 hours)

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the kid's costume and classified suitable wear for different age groups

CO2: Apply the pattern making techniques for constructing garment

CO3: Estimate the layout and cost of the garment

CO4: Evaluate measurements required and materials suitable

CO5: Create different kids wear garments

Text Books:

- 1.Emma Hardy, Making Children's Clothes, Ryland Peters &Small Publisher, 2018
- 2.Mae Gallagher, Pattern Fitting, IndependentlyPublished, 2020

Reference Books:

- 1.Alison Smith, Dress making, Dorling Kindersley Limited Publisher, 2015.
- 2.Yoshiko Tsukiori, Sewfor Your Girls, Tuttle Publisher, 2015.
- 3.SaraMay Allington,Creative Media Partners, Practical Sewing and Dress making,LLC Publisher,2016

Journals:

1. Journal of Designing Comfort Garment for Children
2. Journal of Designing Apparel for Consumer
3. Journal of Sewing Guide

E-Resources:

- 1.<https://www.SewingDivas.com>
- 2.<https://www.Universityoffashion.com>
- 3.<https://www.instructables.com/how-to-sew-a-baby-bib-pattern/>
- 4.<https://sewguide.com/frock-designs/>
- 5.<https://sewguide.com/shirt-designs/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	3	9	3	9	33
CO 2	9	3	9	3	1	1	3	32
CO 3	3	1	9	9	3	3	3	31
CO4	3	3	3	3	3	3	9	27
CO5	3	9	9	9	3	3	9	45
Total	21	19	33	27	19	13	33	168
	Low-1		Medium-3			High-9		

Ability Enhancement Compulsory Course I – Boutique Internship

(For Students Admitted from 2032-24)

Semester: III**Hours/Week: 4****Subject Code: IBFDA33I****Credit:4****Course Objectives:**

1. To gain knowledge about boutique field
2. To develop entrepreneurial skills among students

Unit I**(12 Hours)**

Literature Study Day 1: Learning about the boutique Structure, History and organization structure, Social media awareness and advertisement.

Unit II (12 Hours)
On Site Study Day 2 - 3: Observation – Process, Procedures and product development. Client profile observation.

Unit III (12 Hours)
Data Collection Day 4 - 5: Collection of Data about the industry process, statistics through survey / questionnaire / interview recording of data using pictures, videos, sketches & sample collection.

Unit IV (12 Hours)
Internship Job Role Day 6 - 15: Working in the industry

Unit V (12 Hours)
Documentation Post Internship: Preparation Of Internship Report Document & Ppt
 Suggested Reads: Mean Average, Strength & Weakness analysis.

Course Outcomes:

After successful completion of this course, student will be able to
CO1: Understand the structure and, identify the process of the boutique
CO2: Analyze the functions of various sections in the organization
CO3: Predict the short term and long term targets of an organization
CO4: Justify the impact of organization for the Society
CO5: Create client data as per recruitments with planning and execution

Text Books:

1. Alice Xavier, Fashion Boutique, Parragon Publisher, 2017
2. Greg Alexander, The Boutique, Advantage, Media Group, 2020

Reference Books:

1. Christy Wright, Business Boutique, Ramsey, Press Publisher, 2017.
2. Shawnie Grant, Fashion Beyond Borders, Tailored Boutique Incorporated Publisher, 2018.
3. Stephanie Polite, How to Start a Fashion Boutique, Lulu.com Publisher, 2022.

Journals:

1. Journal of Textile
2. Journal of Boutique Internship
3. My London Fashion Journal

E-Resources:

1. <https://boutiqueeducation.asia/>
2. <https://www.websitebuilderexpert.com/>
3. <https://www.beginningboutique.com.au/pages/careers>
4. <https://www.apparelsearch.com/definitions/miscellaneous/boutique.htm>
5. <https://www.ilovefashionretail.com/copywriting/fashion-copywriting-13-tips-for-writing-product-descriptions-that-will-get-your-customers-to-say-yes/>

Course Outcomes	Programme Outcomes							Total
	PO1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	9	9	3	3	9	39
CO 2	3	3	9	3	1	3	3	25
CO 3	3	3	3	3	3	3	9	27
CO4	3	3	9	9	3	3	3	33
CO5	3	9	9	9	3	3	9	45
Total	15	21	39	33	13	15	33	169

Low-1 Medium-3 High-9

Extra Credit - Clothing Care and Maintenance

(For Students Admitted from 2032-24)

Semester: IV

Subject Code: IBFDS44

Credit: 2

Course Objectives:

1. To impart knowledge on clothing care practices
2. To enable them to know about care label symbols used to maintain different types of fabric

Unit I

(6 hours)

Water and Soap: Types- soft water-hard water- purification of water. Soaps, detergents and fabric conditioner -types manufacturing properties.

Unit II

(6 hours)

Laundering: Objectives– methods - Integrate laundering of white - coloured, cotton, silk, wool, syntheticfabrics, lace materials, carpets. Clothing storing- mending - darning- seasonal care.

Unit III

(6 hours)

Dry cleaning: Chemicals used - sequence - method - commercial dry cleaning. Washing machines – types - working principles. Special care and maintenance of silk and cotton fabrics

Unit IV

(6 hours)

Ironing and pressing Hot air, steam, permanent pressing, and tumble drier –hydro extractor - working principle.

Unit V

(6 hours)

Stain and care: Classification – removal of known and unknown stains - rules in removing fresh and old stains. Stain removers - grease solvents – absorbents - washing soda - borax. Care labels – importance- symbols – uses. Packing – importance – care of import & export packing.

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Understand the care and maintenance of fabrics, classifying the process.

CO 2: Determine the suitable methods of washing, drying, ironing and storing of the fabric

CO 3: Appraise the types of equipment used in the cleaning fabrics

CO 4: Evaluate the methods of caring to be used for a better life of clothes

CO 5: Develop the care and maintenance of fabric packaging and finishing

Text Books:

1. Raj Kishore Nayak, Care and Maintenance of Textile Products Including Apparel and Protective Clothing, Saminathan Ratnapandian, 2018
2. Karen, The Care and Display of Historic Clothing, M. Depauw, Rowman & Littlefield Publishers, 2017

Reference Books:

1. Sally Chivers, Care Home Stories, Ulla Kriebner, transcript Verlag Publisher, 2018.
2. Patric Richardson, Karin B. Miller, Laundry Love, Flatiron Books Publisher, 2021.
3. Mary Schenck Woolman, Clothing, FB&C LTD Publisher, 2016.

Journals:

1. Journal of Clothing Science
2. Journal of Clothing Care
3. Journal of Laundry Care

E-Resources:

1. <https://www.slideshare.net/indianeducation/care-and-maintenance-of-fabrics>.
2. <https://blog.utsavfashion.com/how-to/fabric-maintenance>.
3. https://www.hermanmiller.com/content/dam/hermanmiller/documents/materials/reference_info/Care_Textiles.pdf.
4. <https://fabriclore.com/blogs/news/fabric-care-guide>
5. <https://www.heirloomcreations.net/pressing-or-ironing/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	3	3	1	3	1	3	23
CO 2	3	3	3	3	3	1	1	17
CO 3	9	3	3	9	3	9	9	45
CO 4	9	3	1	3	3	1	9	29
CO 5	9	3	3	9	9	3	1	37
Total	39	15	13	25	21	15	23	151

Low-1 Medium-3 High-9

Core VII – Wet Processing

(For Students Admitted from 2023-24)

Semester: IV

Subject Code: IBFDC411

Hours/Week: 4

Credit: 4

Course Objectives:

1. To study the basic preparatory process
2. To study the processes required for dyeing and finishing

Unit I (12 hours)

Preparatory Processes: Introduction to wet processing- Preparatory process in wet processing. Sequences of wet processing-singeing. De sizing, scouring, and mercerization-objectives and types.

Unit II (12 hours)

Bleaching and Mercerization Processes: Definition, Objectives, Types of bleaching - Oxidative and Reductive, Methods of bleaching- Batch, Semi continuous and Continuous bleaching. Mercerization – Definition, Objectives, Types- Tension and Slack mercerization, Process of mercerization.

Unit III (12 hours)

Dyeing Machineries: Dyeing-objectives-methods of dyeing-machineries used for dyeing process- batch, winch, jig, padding, package dyeing. Dyeing techniques - yarn dyeing and fabric dyeing. Dyeing machineries for garments and knitted fabrics, rotary dyeing, solvent dyeing.

Unit IV (12 hours)

Types of Dyes: Dyeing of textiles–natural-man made – synthetic fibers- vat, reactive dyes, acid dyes, disperse dyes. Yarn dyeing – hank and package dyeing.

Unit V (12 hours)

Finishing Processes: Finishing- objectives-types of finishing-resin finish-acid finish-silicon finish-Teflon, soil repellent, flame retardant, water proofing. Recent finishes - herbal finishes. Finishes for denim, Anti-microbial finishing-COVID 19.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: State the dyeing and printing process, understand sequence of processing

CO2: Demonstrate the dyes and printing equipment and machineries

CO3: Estimate dyes for types of fabrics

CO4: Experiment the dyeing and printing methods

CO5: Create the fabric samples using dyeing, printing methods

Text Books:

1. FaheemUddin, Textile Manufacturing Process, Intech Open Publishing,2019
2. Sekhri, Seema, Fabric Science, PHILearning PVT LTD Publisher, 2020

Reference Books:

1. J N Chakraborty, Fundamentals and Practices in Coloration of Textile, WPI India Publisher, 2015.
2. J N Shah, Guideto Wet Textile Processing Machines, Elsevier Science and Technology Publisher, 2015.
3. Subramaniyan Senthilkannan Muthu, Textiles and Clothing Sustainable Textile Chemical Processes, Springer Singapore Publisher, 2016.

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	1	1	3	1	1	13
CO 2	9	3	9	9	3	1	3	37
CO 3	9	9	9	9	3	3	3	45
CO4	3	1	9	9	3	1	3	29
CO5	3	3	3	9	9	1	9	37
Total	27	19	31	37	21	7	19	161

Low-1

Medium-3

High-9

Core VIII- Wet Processing- Practicals

(For Students Admitted from 2023-24)

Semester: IV

Hours/Week: 5

Subject Code: IBFDC421P

Credit: 4

Course Objectives:

1. To know about the preparatory process of fabric.
2. To impart practical knowledge in textile dyeing and printing.

List of Experiments:

To prepare the each Samples for following experiments

1. Preparatory process (15 hours)
 - a. Scouring
 - b. De sizing
 - c. Bleaching
2. Dyeing Process (40 hours)
 - a. Cotton-reactive dye
 - b. Polyester –Disperse dye
 - c. Silk – acid dye
 - d. Wool– basic dye
3. Resist Dyeing
 - a. Tie & dye
 - b. Batik dye
4. Printing Process (20 hours)
 - a. Block printing
 - b. Screen print
 - c. Stencil Print
 - d. Recent printing techniques (Sublimation Heat transfer print)

Course Outcomes:

After successful completion of this course, student will be able to

CO1: State the dyeing and printing process, understand sequence of processing

CO2: Demonstrate the dyes and printing equipment and machineries

CO3: Estimate dyes for types of fabrics

CO4: Experiment the dyeing and printing methods

CO5: Create the fabric samples using dyeing, printing methods

Text Books:

1. FaheemUddin, Textile Manufacturing Process, Intech Open Publishing, 2019
2. Sekhri, Seema, Fabric Science, PHI Learning PVT LTD Publisher, 2020

Reference Books:

1. J N Chakraborty, Fundamentals and Practices in Coloration of Textile, WPI India Publisher, 2015.
2. J N Shah, Guide to Wet Textile Processing Machines, Elsevier Science and Technology Publisher, 2015.
3. Subramaniyan Senthilkannan Muthu, Textiles and Clothing Sustainable Textile Chemical Processes, Springer Singapore Publisher, 2016.

Journals:

1. Journal of Dyes and Pigments
2. International Journal of Textile Science Research
3. Journal of Textile Finishing

E-Resources:

1. www.Textile Learner.com
2. www.Dyeing World. Com
3. <https://study.com/academy/lesson/what-is-textile-finishing.html>
4. <https://www.contrado.co.uk/blog/printing-methods-differences/>
5. <https://textiletuts.com/types-of-dyeing-machines/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	3	9	3	1	3	37
CO 2	3	9	3	9	3	3	3	33
CO 3	3	3	1	3	1	3	3	17
CO4	3	9	3	9	1	3	9	36
CO5	9	3	3	9	3	1	9	37
Total	27	33	13	39	11	11	27	160

Low-1
Medium-3
High-9

**Ability Enhancement Compulsory Course II–
Construction for Women’s Apparel Practicals**
(For Students Admitted from 2023-24)

Semester: IV
Subject Code: IBFDA43P

Hours/Week: 5
Credit: 4

Course Objectives:

1. To impart knowledge on designing garments for women

2.To enable the students practice skills in drafting, pattern making and construction of selected garment and calculate costing of product

List of Experiments:

Designing, drafting and constructing the following garments for the features prescribed List the Measurements required and Materials suitable Calculate the cost of the garment Calculate the material required –Layout method and direct measurements method

- 1.Saree Petticoat-Six Panel, Decorated bottom. (5 hours)
- 2.Camisoles (5 hours)
- 3.Skirts – Circular/umbrella/panel with style variations. (10 hours)
- 4.Blouse- front open, Princess cut, Fashioned neck, Waist band at front, with sleeve.
- 5.Salwar or Churidar – Length width Variation (10 hours)
- 6..Kameez – with /without slit, with or without flare, with /without opening, with or without panels, with/without yoke. (5hours)
7. Nightie –With yoke, front open, with sleeve, full length, Two-piece night wear (10 hours)
8. Ladies Trouser- waistband, zip attached tight fitting / parallel pants. (10 hours)
9. Tunic top / top – Decorative / surface design in tailored placket, with or without collar. (10 hours)

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the body structure and identify the suitable fabric for women's wear

CO2: Interpret methods of drafting for different types of garments

CO3: Experiment the list out the measurements required and materials suitable

CO4: Estimate the cost of the garment

CO5: Create the various designs in women's wear

Text Books:

- 1.Claire Wargnier,Focuson Fashion Details, Volume 1,ESMODPublishing, 2021
- 2.Laura Irene Baldt,Clothing for Women, Selection, Design, Construction, CreativeMedia PartnersLLC Publisher,2018

Reference Books:

1. Gillian Holman, Bias -Cut Dressmaking, Bats ford Publisher, 2015.
2. Annette Fischer, Sewing for Fashion Designers, Quercus Publisher, 2015.
3. Antonio Donnanno, Fashion Pattern Making Techniques, Hoaki Books Publisher, 2021.

Journals:

1. Journal of Drafting Techniques
2. International Journal of Fashion Design
3. Journal of Pattern Design

E-Resources:

1. <https://sewguide.com/sew-sari-petticoat/>
2. <https://sewguide.com/how-to-sew-skirts/> 3.<https://www.vibhasfashion.com/blouse-cutting-and-stitching>
4. <https://style2designer.com/pattern-cutting-cad-cam/cutting-sewing-techniques/straight-kameez/>
- 5.<https://sewguide.com/free-tunic-pattern/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	9	9	9	3	3	3	9	45
CO 2	3	3	1	1	3	1	3	15
CO 3	9	3	3	9	3	3	9	39
CO4	3	3	1	3	3	3	3	19
CO5	3	3	9	9	3	3	9	39
Total	27	21	23	25	15	13	33	160

Low-1
Medium-3
High-9

Extra Credit –Internship in Textile Processing- Manufacturing Unit

(For Students Admitted from 2023-43)

Semester IV

Subject Code: IBFDX4P

Credit:2

Course Objectives:

1.To enable the students to gain knowledge in various processing methods
2.To educate the students on dyeing techniques

Internship with any textile processing industry or company for a minimum period of 15days. The report to be submitted for evaluation.

Textile Documentation Objectives

1. In depth knowledge of textiles processing
2. To learn research and documentation of various processing methods by visiting and meeting the workers personally.

Documentation should contain the following

1. Introduction
2. Aim
3. Objectives
4. Processing
5. Procedure
6. Questionnaire for survey/ information collection.
7. Results and discussion
8. Summary and conclusion
9. Bibliography

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the structure of textile industry, identify the process unit

CO2: Analyze the methods adopted in the training place

CO3: Predict the short term and long term targets of an organization

CO4: Analyze the textile processing procedure

CO5: Create the report for end of the textile processing internship

Text Books:

1. T Karthik, P Ganesan, D GopalaKrishnan, Apparel Manufacturing Technology, CRC Press Publishers, 2016.
2. Inga Gehrke, Vadim Tenner, Volker Lutz, Smart Textiles Production, MDPI AG Publisher, 2019.

Reference Books:

1. Faheem Uddin, Textile Manufacturing Processes, Intech Open Publisher, 2019.
2. Solomon Tender, Import and Export Guide, Create space Independent Publishing, 2017.
3. Bernice M Hornbeck, U.S. Cotton Textile Imports, FBC Ltd Publisher, 2017.

Journals:

1. Journal of Textile Processing
2. Journal of Textile
3. Journal of Apparel Production

E-Resources:

1. www.Textile Learner.com
2. www.Dyeing World. Com
3. <https://study.com/academy/lesson/what-is-textile-finishing.html>
4. <https://www.contrado.co.uk/blog/printing-methods-differences/>
5. <https://textiletuts.com/types-of-dyeing-machines/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	9	9	3	3	9	33
CO 2	3	3	9	3	1	3	3	25
CO 3	3	3	3	3	3	3	9	27
CO 4	3	3	1	1	3	3	3	17
CO 5	9	3	3	9	3	9	9	45
Total	21	15	25	25	13	21	33	147

Low-1 Medium-3 High-9

Core IX - Fabric Structure and Design

(For Students Admitted from 2023-24)

Semester: V**Hours/Week: 4****Subject Code: IBFDC511****Credit: 3****Course Objectives:**

1. To understand the design, draft and peg plan and loops for different fabric structures
2. To study and compare different knitted and woven structures and textile designs

Unit I**(10 hours)**

Introduction to Weaving: Loom and its classification, Preparatory process for weaving- Winding, Warping, Sizing. Loom operations –primary and secondary motions, objectives - shedding, picking, beat-up, and let-off, take-up motions.

Unit II (20 hours)

Introduction of Woven fabric structure: Introduction, classification of woven structure, Method of weave representation, weave repeat, basic elements of a woven design, types of drafts. Basic Weaves -Plain weave and its variation Twill weave and its variation, Satin weave, Sateen weave, Honeycomb weave, Huck-a-Back weave, Pile and Terry structure

Unit III (10 hours)

Special Woven Fabrics: Backed Fabrics - Warp and Weft, Difference between warp and weft backed fabrics. Extra warp and extra weft figuring – single and two colours, Difference between extra warp and extra weft figuring. End uses of the above weaves. Double Cloth- Classification, warp, Weft and center stitched double cloth. Self-Stitched- back to Face. End uses of the above weaves.

Unit IV (10 hours)

Knitted Fabric Structure: Study of knitted structure – knit, tuck, miss stitch. Study of single jersey, plain, rib, interlock and purl structure. Common defects in knitted fabrics. Comparison between knitted and woven fabrics.

Unit V (10 hours)

Introduction of Textile Designs: Design developments – motifs – repeats. Types of textile design – natural, geometric, conventional, abstract and historical. Study of repeat structures – spot repeats types – brick- drop – directional – non- directional. Study of turnings patterns and its types – flipping horizontal – flipping vertical- turnings spot rotation and angles. Study of diamond and ogee- based design.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the fabric structure and classifying the weaving, knitting processes

CO2: Illustrate the design, draft, peg plan of weaves and knit Structure

CO3: Apply the methods of compound fabric

CO4: Compare the different types of woven and knit structure

CO5: Create and develop textiles designs

Text Books:

1. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016
2. Product and Process, by Michael Hann, Textile Design, CRC Press Publisher, 2020

References Books:

1. J Hayavadana, Woven Fabric Structure Design and Product Planning, WPI India Publisher, 2016.
2. Yordan Kyosev, Warp Knitted Fabrics Construction, CRC Press Publisher, 2019.
3. Kim Gandhi, Woven Textiles, Elsevier Science Publisher, 2019.

Journals:

1. Journal for weavers, Spinners and dyers
2. Knitting International (Open access)
3. Journal of Fabric

E-Resources:

1. <https://www.fibre2fashion.com/industry-article/3759/facts-about-weaving-loom-types>
2. <https://textilestudycenter.com/woven-fabric-structure/>
3. <https://www.fibre2fashion.com/industry-article/8087/weft-knitted-fabrics-and-derivatives>
4. <https://textilemerchandising.com/single-jersey-fabric-double-jersey/>
5. <https://thedesigncart.com/blogs/news/textile-designs>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	1	1	3	3	3	3	17
CO 2	3	1	1	1	9	9	3	27
CO 3	3	1	3	3	3	3	3	19
CO4	9	1	1	3	3	3	3	23
CO5	9	1	1	9	3	9	9	41
Total	27	5	7	19	21	27	21	127

Low-1 Medium-3 High-9

Core X - Fabric Structure and Designing Practices
(For Students Admitted from 202-2)

Semester: V
Subject Code: IBFDC521P

Hours/Week: 5
Credit: 4

Course Objectives:

1. To understand the design, draft and peg plan for different woven structures
2. To develop the knowledge about the textile designing

List of Experiments:

I. Design, Draft and peg plan for the following woven structure (35 hours)

1. Plain weave and its variations
2. Twill weave and its variations
3. Satin weave
4. Sateen
5. Huckaback weave
6. Honey Comb weave
7. Extra Warp weave
8. Extra Weft weave
9. Pile and Terry

II. Knitted Fabric (20 hours)

1. Single Jersey
2. Rib

3. Interlock

4. Purl

III. Textile Designs

(20 hours)

1. Motif creations

2. Repeat structures

a. Brick

b. Drop

c. Directional

3. Non-Directional

a. Turning patterns

b. Flipping Horizontal

c. Flipping Vertical

d. Turnings Spot

e. Diamond and ogee- based

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the fabric structure and classifying the weaving, knitting processes

CO2: Illustrate the design, draft, peg plan of weaves and knit Structure

CO3: Apply the methods of compound fabric

CO4: Compare the different types of woven and knit structure

CO5: Create and develop textiles designs

Text Books:

1. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016

2. Product and Process, by Michael Hann, Textile Design, CRC Press Publisher, 2020

References Books:

1. J Hayavadana, Woven Fabric Structure Design and Product Planning, WPI India Publisher, 2016.

2. Yordan Kyosev, Warp Knitted Fabrics Construction, CRC Press Publisher, 2019.

3. Kim Gandhi, Woven Textiles, Elsevier Science Publisher, 2019.

Journals:

1. Journal for weavers, Spinners and dyers

2. Knitting International (Open access)

3. Journal of Fabric

E-Resources:

1. <https://www.fibre2fashion.com/industry-article/3759/facts-about-weaving-loom-types>

2. <https://textilestudycenter.com/woven-fabric-structure/>

3. <https://www.fibre2fashion.com/industry-article/8087/weft-knitted-fabrics-and-derivatives>

4. <https://textilemerchandising.com/single-jersey-fabric-double-jersey/>

5. <https://thedesigncart.com/blogs/news/textile-designs>

Course Outcomes	Programme Outcomes
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CO	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	1	1	3	3	3	3	17
CO 2	3	1	1	1	9	9	3	27
CO 3	3	1	3	3	3	3	3	19
CO4	9	1	1	3	3	3	3	23
CO5	9	1	1	9	3	9	9	41
Total	27	5	7	19	21	27	21	127

Low-1 Medium-3 High-9

Core XI– Construction of Men’s Apparel Practicals

(For Students Admitted from 2023-24)

Semester: V

Hours/Week: 5

Subject Code: IBFDC53P

Credit: 4

Course Objectives:

1. To impart knowledge on designing garments for women
2. To enable the students to practice skill in drafting, pattern making and construction of selected garment and calculating costing of product

List of Experiments:

Designing, drafting and constructing the following garments for the features prescribed List the Measurements required and Materials suitable Calculate the cost of the garment -Calculate the material required –Layout method and Direct measurements method

- | | |
|---|-------------------|
| 1.Knickers-flap/cargo pockets | (10 hours) |
| 2.Bermuda’s- waist elastic/ sting | (5 hours) |
| 3.Shorts- fly/zipper | (5 hours) |
| 4.Trousers features to add Zip, Pleats, Bottom, Fit | (10hours) |
| 5.Shirt – Half/full sleeve | (10 hours) |
| 6.Kurtha – kalidar | (10 hours) |
| 7.Vest coats – S.B coat | (10 hours) |
| 8.Party Wear – pajama kurta | (15 hours) |

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the men’s apparel, identifying the suitable fabric

CO2: Interpret methods of drafting for different types of garments

CO3: Experiment the list out the measurements required and materials suitable

CO4: Estimate the cost of the garment

CO5: Create a various design in men’s wear

Text Books:

- 1.Gareth Kershaw, Patternmaking for Mens Wear, Laurence King Publishing,2021
- 2.Claire Wargnier, Focus on Fashion Details, Volume 1, ESMODPublishing, 2021

Reference Books:

1. David Page Coffin, The Shirt Making, Quarry Books Publishing, 2015.
2. Jacob Gallagher, the Mens Fashion Book, Phaidon Press Ltd Publisher, 2021.
3. Adriana Gorea, Katya Roelse, Martha L, A Practical Guide for Fashion Designers, Bloomsbury Publishing, 2020.

Journals:

1. Journal of Fashion Design
2. Journal of Pattern Making
3. Journal of Sewing Guide

E-Resources:

1. <https://sewguide.com/free-underwear-tutorials/>
2. <https://sewguide.com/shorts-pattern/>
3. <https://style2designer.com/pattern-cutting-cad-cam/cutting-sewing-techniques/mens-shirt-drafting-sewing-tutorial/>
4. <https://sewguide.com/stitch-a-kalidar/>
5. <https://sewguide.com/stitch-a-kurtha/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	9	3	3	3	9	45
CO 2	3	3	1	1	3	1	3	15
CO 3	9	3	3	9	3	3	9	39
CO 4	3	3	1	3	3	3	3	19
CO 5	3	3	9	9	3	3	9	39
Total	27	21	23	26	15	13	33	157

Low-1

Medium-3

High-9

Core XII – Computer Aided Design CAD Practicals I

(For Students Admitted from 2023-24)

Semester: V**Subject Code: IBFDC54P****Hours/Week: 4****Credit: 3****Course Objectives:**

1. To introduce students to software used for garment designing
2. To develop knowledge about tools used in various software

List of Experiments:**(10 hours)**

1. Software Introduction and Keys
2. Elements of Design - Line - Shape - Colour - Texture - Form
3. Principles of Design - Emphasis - Harmony - Balance - Proportion - Rhythm
4. Motif Creation. - Natural - Stylish - Geometric - Abstract - Traditional
5. Accessory Design - Handbags - Footwear - Hats - Belts - Bow and Tie

6. Textile Designing weaves structure- Dobby and jacquard designs**Create the following designs using Corel Draw Motifs (12 hours)**

1. Embroidery Designs for Kerchiefs.
2. Necklines.
3. Chest Prints.
4. T-shirt.
5. Natural
6. Geometric
7. Abstract
8. Stylized

Children's Garments (7 hours)

1. Jabla
2. Frocks
3. Sun Suit

Women's Garments (10 hours)

1. One Piece Dress
2. Middi & Tops
3. Salwar Kameez
4. House Coat
5. Nighty

Men's Garments (10 hours)

1. S. B Vest
2. T-shirt
3. Shirt
4. Kurta
5. Pant

I. Create Logos for Branded Companies. (4 hours)**II. Create Labels for Garments Companies. (4 hours)****IV. Create content using Ai tools for Designing (3 hours)****Course Outcomes:**

After successful completion of this course, student will be able to

CO1: Understand the designing software, identifying the menus and tools

CO2: Develop elements and principles of design using software

CO3: Create motif design for embroidery

CO4: Illustrate a garment designing children, women's and men's garment

CO5: Create digital logo, label for branded garments

Text books :

1. Robert Hume, Fashion and Textile Design with Photoshop and Illustrator, Bloomsbury Publishing, 2019
2. Jane Alvarado, ComputerAided Fashion Design Using Gerber Technology, Bloomsbury Publisher, 2018

References Books:

1. Ruth Huoh, Fashion Design, New York Publisher, 2017.
2. Patrice Free burger George, Fashion Institute of Technology, The Digital Dawn, State University of New York Publisher, 2020.
3. Joanne Sherrow, Photoshop and Illustrator for Fashion and Textile Design, Fairchild Books Publisher, 2015.

Journals:

1. Journal of CAD
2. Journal of CAD Application
3. Journal of CAD Designing

E-Resources:

1. <https://textilelearner.net/computer-aided-fashion-designing/>
2. <https://www.textileblog.com/cad-cam-in-textile-and-garment-industry/>
3. <https://textilelearner.net/application-of-cad-in-textile/>
4. <https://www.onlineclothingstudy.com/2018/10/cad-system-and-its-application-in.html>
5. <https://textilevaluechain.in/in-depth-analysis/5-ways-computer-aided-design-benefits-the-textile-industry/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	3	9	3	9	9	39
CO 2	9	1	1	9	3	9	9	41
CO 3	9	1	1	3	9	9	9	41
CO 4	3	1	1	3	3	9	9	29
CO 5	9	3	3	3	1	9	9	37
Total	33	9	9	27	19	45	45	187

Low-1

Medium-3

High-9

Core XIII - Fashion Retailing and Consumer Behavior

(For Students Admitted from 2023-24)

Semester: VI**Hours/Week: 5****Subject Code: IBFDC61****Credit: 5****Course Objectives:**

1. To know about the retail business and the visual merchandising techniques
2. To acquire knowledge in the field of advertising and promotional activities

Unit I**(15 hours)**

Retail Merchandising: Retail organization structures, The Marketing Channel, Retailing Formats-Department stores specialty stores, hard – to – classify stores, Depth and breadth, discounting, Other Retailing Formats – non store retailers.

Unit II (15 hours)

Retail Locations: Unplanned shopping districts, planned shopping centers, and the mix of stores in a shopping center. Retail growth and expansion – Retail ownership. International retailing, Retailing advertising.

Unit III (15 hours)

Brands and private labels: Branded merchandising, Licensing, Private labels, and Private labels as brands. Merchandise e-Resources – Manufacturers, Merchant wholesaler – Distributors, Trade shows.

Unit IV (15 hours)

Consumer Behavior: Introduction of consumer behavior – definition – Factors influencing consumer behavior – cultural factor- Social factor- personal factor – psychological factor- personality and self-concept

Unit V (15 hours)

Store Layout and Merchandise Presentation: Store planning and design, Visual merchandising, Store layout, Fixtures, Merchandise presentation, signs.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify fashion product retailing; understand a theoretical and technological knowledge of current business

CO2: Determine the retail business and retail stores, professional practices leading to marketing and merchandising fashion products both locally and globally

CO3: Analyze the retail merchandising private brand labels and trade shows

CO4: Evaluate the measures of productivity, merchandising and pricing

CO5: Arrange retail store layout and visual merchandising for presentation

Text Books:

1. Dimitri Koumbis, Fashion Retailing, from Managing to Merchandising, Bloomsbury Publishing, 2020.
2. John Fernie, David B Grant, Fashion Logistics, Kogan Page Publisher, 2019.

Reference Books:

1. Tsan-Ming Choi, Bin Shen, Luxury Fashion Retail Management, Springer Singapore Publisher, 2016.
2. Rosemary Varley, Ana Roncha, Natascha Radclyffe-Thomas, Liz Gee, Fashion Management, Bloomsbury Publishing, 2018.
3. Peter Bug, Fashion and Film, Springer Singapore Publisher, 2019.

Journals:

1. Autex Research Journals
2. Journal of Fashion Technology
3. Journal of Fashion Marketing and Management

E-Resources:

1. <https://www.retaildoc.com/retail-101/retail-merchandising>
2. www.FashionEra.com
3. <https://www.investopedia.com/terms/p/private-brand.asp>

4. <https://corporatefinanceinstitute.com/resources/knowledge/other/merchandising/>

5. <https://www.handystorefixtures.com/store-planning-design>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	9	9	9	3	3	3	39
CO 2	9	9	3	9	3	3	9	45
CO 3	3	9	9	9	3	1	3	37
CO4	3	3	1	3	3	9	3	25
CO5	9	1	3	9	3	3	3	31
Total	27	31	25	39	15	19	21	177

Low-1

Medium-3

High-9

Core XIV - Textile Testing

(For Students Admitted from 2023-24)

Semester: VI

Subject Code: IBFDC62

Hours/Week: 4

Credit: 4

Course Objectives:

1. To acquire knowledge and learn to handle textile testing instruments
2. To analyze the fiber, yarn and fabric properties and results with statistical tools

Unit I

(12 hours)

Introduction to testing: Terminology of testing - Selection of samples for testing: fibre, yarn and fabric sampling. Standard RH and temperature for testing - Measurement of Moisture regain - Conditioning oven & Shirley Moisture meter.

Unit II

(12 hours)

Fiber Testing: Cotton fiber length - Baer Sorter, Fineness Sheffield micronaire, Maturity, Caustic Soda swelling, Strength - Pressley bundle strength tester, Stelometer. Determination of trash and lint in cotton – Shirley trash analyzer.

Unit III

(12 hours)

Yarn Testing: Determination of yarn count – quadrant, Analytical & Beesley balance. Twist – Direction of twist and amount of twist, Twist effect on fabric properties. Strength of yarn- Single yarn strength tester. Crimp – Shirley crimp tester. Yarn appearance tester. Evenness – Uster Evenness tester, Hairiness – Uster Hairiness tester.

Unit IV

(12 hours)

Fabric Testing: Fabric strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester. Drape – Drape meter, Fabric stiffness - Shirley stiffness Tester, crease recovery – Shirley crease recovery tester. Thermal conductivity, water absorbency test, Water repellency tester.

Unit V**(12 hours)**

Garment Testing: Seam strength, Dimensional Stability, spirally; Accessories Testing: Zipper, Buttons, Sewing thread, Peel bond strength. Colour Fastness of Textiles - Crocking test, perspiration test, sunlight, laundering, dry-cleaning, Computer Colour Matching – Colour measurement and Whiteness Index.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the testing terminology and identifying the statistical tools in textile testing

CO2: Apply the varies testing for fiber to fabric

CO3: Analyze the garment testing method

CO4: Evaluate the fiber and yarn properties

CO5: Develop the Knowledge of textile testing methods

Text Books:

1. Abher Rasheed, Ali Afzal, Faheem Ahmad, Sheraz Ahmad, Advanced Textile Testing Techniques, CRC Press Publisher, 2017
2. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016

References Books:

1. Kim Gandhi, Woven Textiles, Elsevier Science Publisher, 2019.
2. L Ashok Kumar, M Senthil Kumar, Automation in Textile Machinery, CRC Press Publisher, 2018.
3. Patricia Dolez, Olivier Vermeersch, Valerio Izquierdo, Advanced Characterization and Testing of Textiles, Elsevier Science Publisher, 2017

Journals:

1. Journal of Textile Research
2. International Journal of Textile Science Research
3. Journal of Industrial Textile

E-Resources:

1. <https://study.com/academy/lesson/textile-testing-terminology.html>
2. <https://textilelearner.net/classification-of-textile-testing-fiber-testing-yarn-testing-fabric-testing/>
3. <https://textilelearner.net/classification-of-textile-testing-fiber-testing-yarn-testing-fabric-testing/>
4. <https://textilelearner.net/classification-of-textile-testing-fiber-testing-yarn-testing-fabric-testing/>
5. <https://atira.in/fabric-garment-testing/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	1	1	3	1	3	3	15
CO 2	9	1	1	3	9	1	3	27
CO 3	3	3	3	1	3	1	3	17
CO4	3	1	1	3	3	1	1	13
CO5	9	3	3	3	3	3	3	27
Total	27	9	9	13	19	9	13	99
	Low-1		Medium-3			High-9		

Core XV - Computer Aided Design CAD Practicals II

(For Students Admitted from 2023-24)

Semester: VI**Hours/Week: 4****Subject Code: IBFDC63P****Credit: 2****Course Objectives:**

1. To instill the designing abilities of students using Adobe Illustrator
2. To impart knowledge on patternmaking, grading, marker planning

List of Experiments:**Adobe Photoshop Illustrator**

1. Design a garment for children - any 3 designs (5 hours)
2. Design a garment for women - any 3 designs (5 hours)
3. Design a garment for men- any 3 designs (5 hours)
4. Design a visiting card and brochure (5 hours)
5. Textile Design: Weave Structure (10 hours)
 - a) Dobby Design
 - b) Jacquard Design
 - c) Saree Border
 - d) Pallu

Technical Software

1. Create a pattern, grading and prepare a marker plan for children – Bib, Summer Frock, Romper (5 hours)
2. Create a pattern, grading and prepare a marker plan for women – Salwar Kameez, middi & midditop, maxi (10 hours)
3. Create a pattern, grading and prepare a marker plan for men- Full sleeve shirt, Kalidar Kurta, Pyjama (10 hours)
4. Mobile Apps for designing (5 hours)

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify the variety of digital image making techniques, understanding the technical illustration, pattern manipulation and design layout

CO2: Apply the pattern, grading and design development to the fashion industry

CO3: Analyze the pattern grading for children, women and men

CO4: Design digital textile weave structure and jacquard design

CO5: Prepare digital business card and customer profile

Text books:

1. Stacy Stewart Smith, CAD for Fashion Design and Merchandising Studio Access Card, Bloomsbury USA Academic Publisher, 2015
2. Jane Alvarado, Computer Aided Fashion Design Using Gerber Technology, Bloomsbury Publisher, 2018

References Books:

1. Ruth Huoh, Fashion Design, New York Publisher, 2017

2. Patrice Free burger George, The Digital Dawn, Fashion Institute of Technology, State University of New York Publisher, 2020.
3. Joanne Sherrow, Photoshop and Illustrator for Fashion and Textile Design, Fairchild Books Publisher, 2015.

Journals:

1. Journal of CAD
2. Journal of CAD Application
3. Journal of CAD Designing

E-Resources:

1. <https://textilelearner.net/computer-aided-fashion-designing/>
2. <https://www.textileblog.com/cad-cam-in-textile-and-garment-industry/>
3. <https://textilelearner.net/application-of-cad-in-textile/>
4. <https://www.onlineclothingstudy.com/2018/10/cad-system-and-its-application-in.html>
5. <https://textilevaluechain.in/in-depth-analysis/5-ways-computer-aided-design-benefits-the-textile-industry/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	9	1	9	1	9	9	41
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	3	9	9	9	45
CO 4	3	3	1	3	1	9	9	29
CO 5	9	9	9	9	3	9	9	57
Total	27	27	23	33	17	45	45	217

Low-1

Medium-3

High-9

Core XVI– Fashion Portfolio Presentation Project

(For Students Admitted from 2023-24)

Semester: VI**Subject Code: IBFDC64P****Hours/Week: 5****Credit: 4****Course Objectives:**

1. To build up the theme and inspiration-based designing skills.
2. To develop portfolio boards with computer application

Portfolio Development Technique**Collection for portfolio: Research, Forecast study (5 hours)**

1. Theme description and mood board with research study (5 hours)
2. Brand and logo designing according to theme (5 hours)
3. Fashion illustration presentation (5 hours)
4. Design development and Flat sketches- Manual & CAD (5 hours)
5. Tech Pack/ Specification sheet presentation (5 hours)
6. Preparation of pattern according to the design selected garment (15 hours)
8. Constructing the garment according to the customer profile. Garments in the

- collection of 4-6 garments children's, women & men. (20 hours)
 9. Portfolio presentation: Soft copy, Hard copy, modeling with Photo-shoot (10 hours)

Assessment scheme

Portfolio Presentation Technique:

I. Theme board, Mood board, Storyboard, Fabric board, Colour board, Customer Profile, Tech Pack/Specification board, Flat sketch board, Accessory board, Photographic board.

II. Portfolio presentation show on ramp

Project Viva Voce

1. Innovative and current topics must be selected by the students.
2. Students should submit their project with swatches and end uses.
3. Project should be evaluated by internal and external examiners.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the development of portfolio presentation techniques, identifying research and forecasting of recent themes

CO2: Apply the inspiration to the theme portfolio

CO3: Create portfolio board according to an individual theme

CO4: Research and relate fashion design to a broader socio economic, historical, and environmental context

CO5: Create a collection of portfolio garments in various season

Text Books:

1. Linda Tain, Portfolio Presentation for Fashion Designers, Bloomsbury Academic, 2018
2. Lance Derrick, Fashion Design Project Planner, Independently Publisher, 2020

Reference Books:

1. Janace E. Bubonia, Phyllis Borcharding, Developing and Branding the Fashion Merchandising Portfolio, Bloomsbury Publisher, 2016.
2. Sharon Rothman, The Fashion Designers Sketchbook, Bloomsbury Publisher, 2020.
3. Tamara Albu, Michelle Nahum-Albright, Fashion Portfolio, Create, Curate, Innovate, Laurence King Publisher, 2020.

Journals:

1. The Journal of Design, Creative Process & the Fashion Industry
2. The Journal of Dress, Body and Culture
3. Journal of Fashion Portfolio

E-Resources:

1. <https://www.creativeworkers.net/by-program/services-and-training/services-for-your-organization/research-and-survey-services>
2. <https://www.swatchgroup.com/en/swatch-group/boards>
3. <https://www.arts.ac.uk/subjects/accessories-footwear-and-jewellery/short-courses/accessories/fashion-accessories-design-online-short-course-lcf>
4. <https://www.lcca.org.uk/blog/careers/what-is-the-difference-between-graphic-design-and-illustration/>
5. <https://design.studio/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	9	3	9	3	3	9	39
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	9	3	3	3	33
CO4	9	3	9	9	3	3	3	39
CO5	9	3	9	9	3	3	9	45
Total	33	21	33	45	15	21	33	201

Low-1
Medium -3
High-9

Core XVII - Fashion Photography and Modeling [Theory cum Practicals]

(For Students Admitted from 2023-24)

Semester: VI

Hours/Week: 5

Subject Code: IBFDC65

Credit: 5

Course Objectives:

- 1.To impart knowledge on fashion photography under different lightings
- 2.To acquire knowledge about fashion designer photo gallery preparation

Unit I

(15hours)

Introduction to Photography and Camera: Principles of Photography – Types of photography- Basics of digital photography – Shutter speed, Aperture, ISO – Components involved in Photography – Types of cameras – Camera handling – support and accessories – Lenses – Lens filters.

Unit II

(15hours)

Composition and Basic Lighting: Nature of light – light source – Understanding the camera and Lighting Techniques –Primary Lighting – Soft, Accent or Secondary Lighting, Atmosphere. Lighting – types of colour – controlling intensity of light – Over and under exposures.

List of Experiments:

- i) Photographs with various lightings
- ii) Photographs with various backgrounds
- iii) Golden ratio

Unit III

(15 hours)

Introduction to Modelling: Types of modeling walk- concept of Posing – Body language and Attitude –: Catwalk and Ramp Walk Technique – Personal style and Photogenic Skills – Grooming Etiquette.

Unit IV

(10 hours)

Modeling in Advertising: Introduction to Fashion Modeling-Ethics of modeling - Understanding the minds of people- Exploiting the weakness of Humanism – Modeling in advertisements.

Unit V (20 hours)

Strategies of Fashion Photographer: Techniques to be a successful fashion photographer- expressions emotions-Importance of background of the object- Highlighting techniques of textures -Photo editing, Video editing and mixing techniques. Creating post for social media (Instagram, Pinterest, Youtube etc.,)

List of Experiments:

- a. Close-Up shots
- b. Long shots
- c. Modeling snaps
- d. Action photographs
- c. Highlighting the features of a designer costume
- d. Flat photography
- e. Product photography
- f. Ghost – Mannequin photograph

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the basics of photography, identifying elements and principles

CO2: Demonstrate the part of camera parts and types of DSLR camera

CO3: Compare natural and artificial lights in camera

CO4: Develop knowledge in modeling walk, photogenic skills

CO5: Prepare fashion photographs in various angles and types of photography

Text Books:

1. Dixie Dixon, Fashion and Lifestyle Photography, Octopus Publisher, 2017
2. Ryan Shebeeb, Fashion Photography, Handling Camera, Independently Publisher, 2017

Reference Books:

1. Thomas Werner, The fashion Image, Bloomsbury Publishing, 2019
2. Susanna Brown, Elizabeth Anne McCauley, Michal Raz-Russo, Shaw, Icons of Style, Paul Martineau Publishing, 2018.
3. Tatiana Kurnosova, All You Need to Know about Model Test Shoots, Independently Published, 2019.

Journals:

1. International Journal of Design Management and Professional Practice
2. Textile Magazine
3. Journal of Fashion Photography

E-Resources:

1. <https://expertphotography.com/principles-of-design-photography/>
2. <https://photodoto.com/photography-lighting-techniques/>
3. <https://thehub.com/2018/10/10/types-of-modeling/>

4. <https://www.scribd.com/presentation/55633437/Introduction-to-Fashion-Modelling>

5. <https://expertphotography.com/the-complete-guide-to-fashion-photography-tip>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	3	9	3	23
CO 2	3	3	1	3	1	9	9	29
CO 3	3	3	1	9	3	9	9	37
CO4	9	9	9	3	9	3	9	51
CO5	3	3	1	3	1	3	3	17
Total	21	21	13	19	17	33	33	157

Low-1 Medium-3 High-9

Extra Credit- Mini Project

(For Students Admitted from 2023-24)

Semester: VI

Subject Code: IBFDX6W

Credit: 2

Course Objectives:

1. To anticipate consumer trends
2. To create clothing designs

Design Development in form of Portfolio

- a. Design brief
- b. Design inspiration – Mood board/ theme board
- c. Sourcing of Fabrics
- d. Development of Design
- e. Feedback and improvement
- f. Exam as portfolio and viva –voce

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the working structure of company identifying the design development department

CO2: Analyze the methods of design development

CO3: Assess the process through work experience within the company

CO4: Develop the portfolio boards regarding project theme

CO5: Create the report for complete project

Text Books:

1. Seive wright Simon, Basics, Fashion-Research and Design, Bloomsbury Publisher, 2016
2. Robert Hume, Fashion and Textile Design with Photoshop and Illustrator, Bloomsbury Publishing, 2019

Reference Books:

1. Ruth Huoh, Fashion Design, New York Publisher, 2017
2. Patrice Freeburger George, The Digital Dawn, Fashion Institute of Technology, State University of New York Publisher, 2020
3. Joanne Sherrow, Photoshop and Illustrator for Fashion and Textile Design, Fairchild Books Publisher, 2015

Journals:

1. Journal of Design
2. Journal of Portfolio Application
3. Journal of CAD Designing

E-Resources:

1. <https://textilelearner.net/computer-aided-fashion-designing/>
2. <https://www.textileblog.com/cad-cam-in-textile-and-garment-industry/>
3. <https://textilelearner.net/application-of-cad-in-textile/>
4. <https://www.onlineclothingstudy.com/2018/10/cad-system-and-its-application-in.html>
5. <https://textilevaluechain.in/in-depth-analysis/5-ways-computer-aided-design-benefits-the-textile-industry/>

Course Outcomes	Programme Outcomes							
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	1	1	3	1	1	13
CO 2	9	3	9	9	3	1	3	37
CO 3	9	9	9	9	3	3	3	45
CO 4	3	1	9	9	3	1	3	29
CO 5	3	3	3	9	9	1	9	37
Total	27	19	31	37	21	7	19	161

Low-1

Medium-3

High-9

Discipline Specific Elective I – a. Fashion Merchandising and Marketing

(For Students Admitted from 2023-24)

Semester: V**Hours/Week: 4****Subject Code: IBFDE5A****Credit: 5****Course objectives:**

1. To study the challenges in apparel business, role of planning and forecast market strategy
2. To create as entrepreneurs in the field of production, marketing and merchandising by providing extensive knowledge and technical, behavioral skills

Unit I**(15 hours)**

Introduction to Apparel Business: International apparel business pattern, basic business concepts in Indian apparel export house, business operations in China and other south Asian countries. Business patterns for Indian apparel retail and home textiles. Understanding from concept board to finished product and its sequence.

Unit II (15 hours)

Marketing for Apparel and Textile Products: Defining marketing, marketing mix the objectives of the marketing department, market research, different types of markets, marketing strategies concerning a product/brand, marketing models, B to B marketing, B to C marketing, direct marketing, digital marketing, Social media marketing blogs.

Unit III (15 hours)

Introduction to Merchandising: Definition-scope of merchandising-merchandising terminology-types of merchandising-functions of merchandising-responsibilities of the merchandiser-skill sets of the merchandiser. Creative and technical design in garments and accessories, new product development and seasons of sale, costing, coordination and communication with the production house and export house.

Unit IV (15hours)

Sourcing, Costing, And Pricing: Costing-elements of costing-importance of costing- pricing strategies-pricing formula-mark up and down-negotiations and order procurement- sourcing strategies-sourcing options-sourcing process-international sourcing and domestic sourcing-vendor identification.

Unit V (15 hours)

Export Documentation and Policies: Government policies, guidelines for apparel export and domestic trade, tax structures and government incentives in apparel trade. Export documents and its purposes, banking activities, Letter of credit, logistics and shipping, foreign exchange regulation, export risk management and insurance. Export finance and Special economic zones.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the purpose of merchandising, identifying marketing strategies in the industries

CO2: Interpret merchandising plan and sales forecasting

CO3: Organize creative design process of merchandising

CO4: Analyze the elements of costing, sourcing and pricing

CO5: Develop the production systems and implement quality control

Text Books:

1. James Clark, Fashion Merchandising, BloomsburyPublishing,2020
2. Rosy Boardman, Rachel Parker-Stark, Claudia E. Henninger, Fashion Buying and Merchandising, Taylor & Francis Publisher,2020

Reference Books:

1. Sarah Bailey, Jonathan Baker, Visual Merchandising for Fashion, Bloomsbury Publishing, 2021.
2. MaryG Wolfe, Fashion Marketing and Merchandising, Good Heard Wilcox Company Publisher, 2018.
3. Donna L Bade Export /Import Procedures and Documentation, American Management Association Publisher, 2015.

Journals:

1. Journal of Fashion Marketing and Management
2. International Journal of Design Management and Professional Practice
3. Journal of Marketing

E-Resources:

1. <https://www.apparelbusiness.com/>
2. <https://www.fibre2fashion.com/industry-article/4597/applying-marketing-mix-modeling-in-the-apparel-business>
3. <https://www.investopedia.com/terms/m/merchandising.asp>
4. <https://future.aicpa.org/cpe-learning/course/costing-strategies>
5. https://agriexchange.apeda.gov.in/Ready%20Reckoner/EXPORT_DOCUMENTATION.aspx

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	1	3	3	15
CO 2	3	3	3	9	3	9	9	39
CO 3	3	3	3	9	3	3	3	27
CO 4	9	3	3	9	3	9	9	45
CO 5	3	3	1	9	3	3	3	25
Total	21	15	11	37	13	27	27	151

Low-1

Medium-3

High-9

Discipline Specific Elective I - b. Apparel Business Accounting and Entrepreneurship

(For Students Admitted from 2023-24)

Semester: V**Hours/Week: 4****Subject Code: IBFDE5B****Credit: 4****Course Objectives:**

1. To understand the fundamental concept and principles of business accounting
2. To impart knowledge about various institutions supporting entrepreneur

Unit-I**(12 hours)**

Accounting Principles: Introduction to accounting principles – meaning and scope of accounting – double entry system – advantages – difference between double entry and single entry– accounting concepts, principles and conventions – journal, ledger and trial balance.

Unit-II**(12 hours)**

Introduction to Cost and Financial accounting: Fundamental principles of cost accounting -nature and scope- elements of cost-classification of cost-preparation of cost sheet- marginal costing-fixation of selling price-make or buy decisions-selection of a suitable product mix. Preparation of financial accounts- trading, profit, and loss account-balance sheet- adjustment entries. Uses and limitations of financial accounting.

Unit-III (12 hours)

Introduction to Apparel Entrepreneurship: Definition of entrepreneur-Meaning qualities of a successful entrepreneur in textile and apparel industry – functions - types of apparel entrepreneurs- entrepreneurs and managers- role of entrepreneurship in economic development– barriers of entrepreneurship.

Unit-IV (12 hours)

Entrepreneurial development programs: Phases of entrepreneurial development programs - content of training program - Steps for starting a small industry – sources of support for entrepreneurs - institution assisting entrepreneurs. Management and the entrepreneur- Equipment management, Inventory control- production Control- quality control, cost control and business communication.

Unit-V (12 hours)

Entrepreneurship in apparel industry: Business planning – Starting a new venture related to apparel industry, essentials of a successful center; Location & plant layout-factors, influencing plant location, building, structure, lighting, ventilation, material handling, availability of labor, material management and transportation.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify the business accounting, understanding entrepreneurship skills among the students in the textile/apparel field

CO2: Explaining the accounting procedure and process of setting up new enterprises to the students

CO3: Analyze the managing role of the entrepreneur

CO4: Developing awareness in the rules and policies of the enterprises

CO5: Organizing production process and business support to entrepreneur

Text Books:

1. Debasish Biswas, Chanchal Dey, Entrepreneurship Development in India, Taylor & Francis Publisher 2021
2. Mads Faurholt, Lars Tvede, Entrepreneur, Wiley Publisher, 2018

Reference Books:

1. Andreas Masouras, Androniki Kavoura, Georgios Maris, Entrepreneurial Development and Innovation in Family Businesses and SMEs, IGI Global, Business Science Publisher, 2020.
2. M. Y. Khan, P. K. Jain, Financial Management, McGraw-Hill Education Publisher, 2018.

Journals:

1. Journal of Entrepreneurship
2. International journal of Entrepreneur and Innovation
3. Academic of Entrepreneurship Journal

E-Resources:

1. <https://thegriffund.com/entrepreneurship-definition/describe-principles-concept-scope-entrepreneurship/>
2. <https://textilevaluechain.in/news-insights/policies-that-led-to-the-growth-of-textile-and-garment-industry-in-india/>

3. <https://www.apparelentrepreneurship.com/about-us/> 4. <https://textilevaluechain.in/news-insights/design-management-in-textile-industry/> 5. <https://news.gcase.org/2011/10/24/what-is-entrepreneurial-management/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	9	3	3	3	3	3	9	33
CO 2	3	3	1	1	1	3	3	15
CO 3	9	9	9	9	3	3	9	51
CO4	3	3	3	1	1	3	9	23
CO5	3	3	3	3	1	3	9	25
Total	27	21	19	17	9	15	39	147

Low-1
Medium-3
High-9

Discipline Specific Elective II - a. Apparel Quality Control

(For Students Admitted from 2032-24)

Semester: V

Hours/Week: 4

Subject Code: IBFDE5C

Credit: 4

Course Objectives:

- To gain knowledge in system of apparel quality
- To understand the quality parameters of the apparel industry

Unit I

(12 hours)

Apparel Quality: Quality-Definition-Objectives-Importance of quality-Quality terminologies-No Inspection-100 % Inspection-Spot checking-Arbitrary Sampling-statistical sampling –specifications sheet.

Unit II

(12 hours)

Quality Standards: Standards-Introduction- Benefits of Standards-Levels of Standards-Sources of Standards-ASTM-AATCC- ANSI-BSI-ISO-OEKO.

Unit III

(12 hours)

Inspection: Inspection- Raw material inspection-fabric inspection- 4-point system, 10-point system - Sewing thread-Zippers- Buttons, Buckles and snap fasteners interlining. In process

inspection- Spreading-Cutting-Sewing-Control of fusing Operation-Control of screen printing operation- Control of embroidery operation-Pressing, Final inspection.

Unit IV (12 hours)

Managing Quality: Managing quality through inspection- Managing quality through testing- Seven tools of quality-Cause and effect diagram-Check sheet-Control chart-Flow chart-Histogram-Pareto chart-Scatter diagram.

Unit V (12 hours)

Fabric Defects: Definition-Self descriptive defects-Types of defects-Baggy-Bar -Balk-Bowed filling-chafe-Fly-Hitch back-Jerked in filling- Pick out mark-Shaded- Smash - Temple marks- Tendering.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the importance of quality control, identifying the apparel quality control process

CO2: Integrate consumer, aesthetic and quantitative trend information into the product development process

CO3: Estimate the new value into an existing product or line while holding costs

CO4: Evaluate the fabric and sewing defects

CO5: Manage the fabric quality and standards

Textbooks:

1. Stanley Bernard Brahams, The Fundamentals of Quality Assurance in the Textile Industry, CRC Press Publisher, 2016.
2. T. Karthik, P. Ganesan, D. Gopalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016.

Reference Books:

1. Rajiv Padhye, Rajkishore Nayak, Automation in Garment Manufacturing, Elsevier Science Publisher, 2017.
2. Douglas C. Montgomery, Introduction to Statistical Quality Control, Wiley Publisher, 2020
3. Pradip, V. Mehta, Dr. Rajesh Bheda, Rakhi Handa, Paul F. Bowes, G. Jayapal Nair and Late Dr. Rams, Quality Tools Implementation in Apparel Manufacturing, Apparel Design PVT Ltd Publisher, 2020.

Journals:

1. Online Journal of the International Fashion and Apparel Industry
2. Research Journal of Fashion Technology
3. Journal of Quality Control in Apparel Sectors

E-Resources:

1. <https://www.hqts.com/apparel-quality-control-standards-and-procedures/>
2. <https://asq.org/quality-resources/learn-about-standards>
3. <https://www.intertek.com/textiles/inspection/> 4. <https://www.woolwise.com/wp-content/uploads/2017/05/07.2-Textile-Quality-Management-Notes.pdf>
5. <https://www.onlineclothingstudy.com/2019/02/classification-of-fabric-defects.html>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	3	3	3	3	9	3	27
CO 2	3	3	9	9	3	1	9	37
CO 3	3	3	3	9	1	3	3	25
CO4	3	1	1	1	1	1	3	11
CO5	3	3	3	3	1	1	3	17
Total	15	13	19	25	9	15	21	117
	Low-1		Medium-3			High-9		

Discipline Specific Elective II. b -Apparel ProductionManagement

(For Students Admitted from 202-2)

Semester: V

Hours/Week: 4

Subject Code: IBFDE5D

Credit: 4

Course Objectives:

1. To familiarize more about process of apparel manufacturing unit
2. To enable students to study production and planning process

Unit I

(12 hours)

Human Resource Development: Introduction to Structure and Sectors of Clothing Industry- Job Analysis and Description-Job Specification-Recruitment and Selection-Kinds of Interview-Purpose of Appraisal-Criteria of Appraisal-Methods of Appraisal Methods-Limitations-Human Resource Development Methods and Processes-Sewing Room Supervisor's Job and Training Needs - Human Resource Development in Indian Apparel Industry.

Unit II

(12 hours)

Plant Engineering & Line Balancing: Introduction to garment industry plant location - Location economics - Plant layout- Process layout- Product layout -Combination Layout - Introduction to balancing theory- Balance control- Balancing exercises for garment industry.

Unit III

(12 hours)

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 IV

(12 hours)

Methods of Production Systems: Production and productivity methods of production systems – Job, Mass & Batch –Section systems, Progressive bundle system & Synchrony system– Conveyor systems – Unit production system – Quick response.

Productivity concepts – Measurement of productivity– –Man Machine Material"–
Criteria for increasing productivity.

Unit V

(12 hours)

Production Planning and Control: Function, Qualitative and quantitative analysis of production - Coordinating departmental activities - Basic production systems - Evaluating and choosing the system- Flow process and charts for garment - Scheduling calculations -Assigning operators optimally - Setting up complete balanced production lines to produce given amount of garments.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the production structure, identifying production management of the global textile/apparel industries

CO2: Demonstrate effective leadership, teamwork, and communication skills

CO3: Explain the plant location and balance the garment industry

CO4: Evaluate the work measurement of apparel production management

CO5: Develop the present merchandise lines for identified market segments

Text Books:

1. R. Rathinamoorthy, R. Surjit, Apparel Machinery and Equipment, CRC Press Publisher, 2015
2. Richard Blackburn, Sustainable Apparel: Production, Processing and Recycling, Wood head publishing, 2015

References Books:

1. T. Karthik, P. Ganesan, D. Gopalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016.
2. Miguel Angel Gardetti, Subramanian Senthilkannan Muthu, Sustainability in the Textile and Apparel Industries, Production Process Sustainability, by Springer International Publishing, 2020.
3. Rajiv Padhye, Raj Kishore Nayak, Automation in Garment Manufacturing, Elsevier Science Publisher, 2017.

Journals:

1. Journal of Textile and Apparel, Technology and Management. (JTATM)
2. Research Journal of Textile and Apparel (RJTA)
3. Journal of Clothing Science and Technology

E-Resources:

1. <https://unevoc.unesco.org/home/human+resource+development&context=>
2. <https://apparelresources.com/business-news/manufacturing/apparel-plant-layout-basics/>
3. <https://www.businessmanagementideas.com/production-management/work-study-definition-need-and-advantages-production-management/9592>
4. <https://www.britannica.com/technology/production-system>
5. <https://www.managementstudyguide.com/production-planning-and-control.html>

Course Outcomes	Programme Outcomes
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CO	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	3	1	1	1	3	1	3	7
CO 2	3	9	3	3	1	1	3	23
CO 3	3	3	1	1	3	1	3	15
CO4	3	1	1	1	3	1	3	13
CO5	3	3	3	3	3	3	3	21
Total	15	17	9	9	13	7	15	79

Low-1

Medium-3

High-9

Discipline Specific Elective III a. Fashion Communication

(For Students Admitted from 2023-24)

Semester: VI

Subject Code: IBFDE6A

Hours/Week: 4

Credit: 4

Course Objectives:

1. To study the basic communication in fashion industry
2. To plan and develop communication strategies, promote events, and write articles as fashion journalists

Unit I

(12 hours)

Fashion and the communication process: Define fashion process, Theories of fashion adoption need for promotion of fashion, need for the communication process and communication through different media.

Unit II

(12 hours)

Written Communication: Fashion writing, creative writing reporting features, editing, printing techniques, image management and advertising, public relations, press laws and media ethics.

Unit III

(12 hours)

Visual Communication: Fashion photography, window display and multimedia – audio, still images, animation, video footage and interactivity.

Unit IV

(12 hours)

Communication: Communication in practice, Scripting shows, conducting interviews, reporting events, fashion critics, planning PR campaigns, formulating case studies, designing catalogs and brochures. Visualization of décor and ambience, preparing short films/audio-visuals, choreography of fashion events.

Unit V**(12 hours)**

Fashion Magazine: Designing of own fashion magazines/Designing of own fashion brochures by the students/designing a look book/designing a line planning.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Identify the clothing and fashion classify the fashion communication

CO2: Apply the fashion design work of others and providing constructive criticism for ongoing work

CO3: Justifying ideas suitable for photography and fashion publication

CO4: Compose fashion articles and future for digital media

CO5: Create knowledge of fashion magazines and brochures for advertisement

Text Books:

1. Francesca Cominelli, Lorenzo Cantoni, Nadzeya Kalbaska, Teresa Sádaba, Fashion Communication in the Digital Age, Springer Publisher, 2019
2. Emily Huggard, Jon Cope, Communicating Fashion Brands, Taylor Francis Publisher, 2020

References Books:

1. Caline Anouti, Barbara Graham, Promoting Fashion, Laurence King Publishing, 2018.
2. Gwyneth Moore, Fashion Promotion, Bloomsbury Publishing, 2021.
3. Byoung-ho Jin, Elena Cedrola, Fashion Branding and Communication, Palgrave Macmillan US publisher, 2017.

Journals:

1. Journal of Berlin Fashion
2. Journal of Dress, Body and Culture
3. Journal of Fashion Communication in the digital age

E-Resources:

1. <https://killervisualstrategies.com/blog/category/visual-communication-2>
2. <https://www.inc.com/encyclopedia/written-communication.html>
3. <https://www.quora.com/What-is-fashion-communication>
4. <https://photographycourse.net/the-4-different-types-of-fashion-photography/>
5. <https://www.magazinline.com/blog/best-fashion-magazines>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	9	9	3	3	1	9	43
CO 2	9	1	1	3	9	1	3	27
CO 3	3	1	1	3	3	1	1	13
CO4	3	1	1	3	3	1	1	13
CO5	9	3	3	3	3	3	3	27
Total	33	15	15	15	21	7	17	123

Low-1

Medium-3

High-9

Discipline Specific Elective III b. Event Design and Management

(For Students Admitted from 2023-24)

Semester: VI
Subject Code: IBFDE6B

Hours/Week: 4
Credit: 2

Course Objectives:

- 1.To understand the concept of event design and management
- 2.To understand the event layout and event organizing skills

Unit I (12hours)

Principles of Project Event Management from Concept to Reality: Understanding event management-types of events-corporate events-promotional events and celebrity events principles of event management-project selection-role of the event manager seeking sponsors-different types of sponsorship-writing sponsorship letter-budget-break-even point- profit and loss statement-balance sheet-panic payments.

Unit II (12hours)

Setting the Scene: Background effects creating magic with fabrics – types of fabric and specific uses – room draping and backdrops – chair and table drapery – customizing fabric effects to specific ceremonies.

Unit III (12hours)

Event Design Planning: First client meeting – building a bond and rapport –asking the right questions – presenting design brilliant strokes of inspiration – tools and resources – décor design outline – indoor and outdoor décor – lighting – choreography and audio visual tools – design presentation process – renderings – vision/ mood boards –textiles – colors.

Unit IV (12hours)

Furnishing and Décor Customizing the furniture: Different styles and layouts – flower decorations – significations and selection of flowers – different types of arrangements – table arrangements – different styles and layouts – accent décor – audio visual tools.

Unit V (12hours)

Organizing the Event and Safety Purpose: Venue- timing- guest list- invitations- food drink – green room dressing and management - equipment - guest of honor - speakers-media – photographers – podium – exhibition – security – occupational safety – crowd management – major risks and emergency planning.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the principles of event management, identifying the theme base event

CO2: Construct a suitable background effect using different fabrics

CO3: Compose and plan for various events

CO4: Illustrate different styles and layout for furniture and flower arrangement

CO5: Organize the event skillfully

Text Books:

1. Vladimir Antchal, Olivia Rams bottom, The Fundamentals of Event Design, Taylor& Francis Publisher, 2019
2. Ruth Dowson, David Bassett, Event Planning and Management, Kogan

Page Publisher2018

Reference Books:

1. Alex Genadinik, Event Planning, Create Space Independent Publishing 2015
2. Donald Getz, Stephen Event Studies, Taylor & Francis Publisher, 2016.
3. Roel Frissen, Ruud Janssen, Dennis Luijter, Dave Gray, Event Design, BIS Publishers, 2016.

Journals:

1. Journal of Event Studies
2. Journal of Research and Policy For Planned Events
3. International Journal of Event and Festival Management

E-Resources:

1. <https://www.thebalancesmb.com/what-is-event-management-4067066>
2. <https://www.picocleaners.com/blog/the-12-different-types-of-fabric/>
3. <https://www.eventmobi.com/blog/outdoor-event-planning-8-practicals-considerations/>
4. <https://www.forbes.com/sites/amandalauren/2020/10/21/accessible-custom-furniture-and-decor-is-the-next-big-interior-design-trend/?sh=54352a34e71d>
5. <https://www.eventbrite.co.uk/blog/guide-health-and-safety-for-events-ds00/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	1	3	3	3	3	3	19
CO 2	9	3	3	9	3	9	9	45
CO 3	3	3	9	3	9	9	9	45
CO4	3	3	1	3	1	9	9	29
CO5	9	9	9	9	3	9	9	57
Total	27	19	25	27	19	39	39	195

Low-1

Medium-3

High-9

Skill Enhancement Course I - Fiber to Yarn

(For Students Admitted from 2023-24)

Semester: I

Subject Code: IBFDS14

Hours per Week: 2

Credit: 2

Course Objectives:

1. To study the natural and manmade fibers properties.
2. To know the different types of yarn and manufacturing method

Unit I

(6 hours)

Introduction to Textile Fibers: Introduction to textile fibers - classification of fibers - natural and synthetic-according to their nature and origin-essential and desirable properties of textile fibers-staple and filament-comparison of natural and manmade fibers.

Unit II (6 hours)

Natural Fibers: Cotton fibers-properties and uses-jute fiber-extraction, properties and uses-flax fiber, hemp fibers-properties and uses-silk fiber-life cycle of silk worm-silk reeling and throwing-properties and uses-wool fiber-varieties of wool -differences between -worsted and wool fiber- properties and uses- brief study of hair fibers.

Unit III (6 hours)

Man-made Fibers: Regenerated fibers – viscose rayon – manufacturing process - properties and uses-modal, Lyocell, bamboo - synthetic fibers – polyester manufacturing process – properties and uses-nylon 6 and 6, properties and uses – polypropylene, acrylic.

Unit IV (6 hours)

Yarn Manufacturing Process: Spinning –Definition, blending, opening, cleaning, doubling, carding, combing, drawing,roving, spinning. Classification – Chemical and mechanical spinning.

Unit V (6 hours)

Yarn and its classifications: Definition, Classification – yarn twist, types and effects, simple and fancy yarns-Quality parameters while sourcing yarn - Sewing threads and its properties.

Course Outcomes:

After successful completion of this course, student will be able to

- CO 1:** Understand the natural and man-made fibers, identifying their uses
- CO 2:** Determine the properties and manufacturing process of textile fibers
- CO 3:** Analyze the yarn development process
- CO 4:** Compare the Sewing thread with textile yarn
- CO 5:** Summarize the classification and quality of fiber and yarn

Text Books:

1. T Karthik, P Ganesan, D Gobalakrishnan, Apparel Manufacturing Technology, CRC Press Publisher, 2016
2. Jonathan Y Chen, Activated Carbon Fiber and Textiles, Elsevier Science Publisher, 2016

Reference Books:

1. FaheemUddin, Textile Manufacturing Processes, Intech OpenPublisher, 2019.
2. H V Sreenivasa Murthy, Introduction to Textiles Fibers, WPI India Publisher, 2018.
- 3.R.Senthilkumar, Fancy Yarn - Types, Manufacturing Techniques, Applications, Create Space Independent Publisher, 2017.

Journals:

1. Journal of Textile Design Research and Practice
2. Journal of Natural Fibers
3. Journal of Textile Testing

E-Resources:

1. https://edurev.in/studytube/Class-Notes-Fibre-to-Fabric/5dc96315-111b-4625-bc82-d1777f820f9a_t
2. <http://www.fibre2fashion.com/industry-article/7650/fibre-to-fabric-manufacturing- process-of- wool>
3. <https://www.leichtfried-loden.com/en/from-fibre-to-fabric/#step-dyeing>

4. [http://www.nios.ac.in/media/documents/SecHmscicour/english/Home%20Science%20\(Eng\)%20Ch-10.pdf](http://www.nios.ac.in/media/documents/SecHmscicour/english/Home%20Science%20(Eng)%20Ch-10.pdf)

5. <https://textilelearner.net/concept-of-yarn-manufacturing-process/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	3	1	1	13
CO 2	9	3	9	9	3	1	3	37
CO 3	9	9	9	9	3	3	3	45
CO 4	3	1	9	9	3	1	3	29
CO 5	3	3	3	9	9	1	9	37
Total	27	19	31	37	21	7	19	161

Low-1 Medium-3 High-9

Skill Enhancement Course II– History of Fashion and Traditional Design

(For Students Admitted from 2023-24)

Semester: II

Hours/Week: 2

Subject Code: IBFDS24

Credit: 2

Course Objectives:

1. To develop knowledge regarding historic costumes used in different civilizations
2. To study the traditional designs and embroideries specific to each region

Unit I

(6 hours)

History of Indian Costumes: Introduction to Indian costumes - the earliest times of the historical period Indus valley civilization costumes, Indo Aryans and Vedic ages, Mauryan and the Sunga period, Satavahana period, Kushan period, Mughal period.

Unit II

(6 hours)

History of World Costume: Introduction: Pre-historic reference- development- adoption of fibrous apparel- initial manufacture of clothes. Earlier decoration of textiles. Costumes of European countries -Italy, France, Greece, roman, Sweden & Germany. Costumes of far Eastern Countries: Japan, Korea, Sri Lanka, Pakistan, Malaysia, China, Burma, Thailand & the Philippines. Costumes of American & Africans.

Unit III

(6 hours)

Traditional Costumes and Embroideries of India: Introduction to costumes and Embroideries of India - Tamil Nadu , Kerala, Karnataka, Andhra Pradesh, Madhya Pradesh, uttar Pradesh, Gujarat, Rajasthan, Punjab, Himachal Pradesh Jammu and Kashmir. Tamilnadu Tribal (TODA),Kashmir embroidery, Kanthas of Bengal, Chamba rummal of Himachal Pradesh, Chickenkari of Uttar Pradesh, Pulkhari of Punjab, Kasuti embroidery, Kutch embroidery.

Unit IV (6 hours)

Traditional Woven Textiles: Introduction to woven textiles of India – Brocades of Banaras, Himrus, Amrus, Baluchari, Pithambar, Paithani, Tamil nadu Saree. Types of woven Kashmir shawls – Do- shala, Do- rukha, Kasubha shawl.

Unit V (6 hours)

Traditional Prints and Dyes of Textiles: Printed textiles – Kalamkari, Block printing, Roghan printing and other printed and painted textiles (Mata-ni-pachedi, Pabuji-ka-pad) Dyed textiles – Ikat, Patola, Bandhani, Laharia, Mashru.

Course Outcomes:

After successful completion of this course, student will be able to

CO 1: Understanding the origin of costumes and classifying its history

CO 2: Determine the regional variation of costume and designs, motifs in different states

CO 3: Awareness about the historic and traditional costumes in various occasions

CO 4: Apprise the various traditional methods used for decorative designing

CO 5: Develop various dyeing and printing and their terminologies

Text Books:

- Phyllis G. Tortora, Sara B. Marcketti, Survey of Historic Costume, Bloomsbury Publisher, 2015
- Janarthanan U, World History of Textiles and Costumes, Amazon Digital Services LLC-KDP Print US Publisher, 2020

Reference Books:

- Giovanna Alessio, Johnna Rizzo, The Culture of Cloth, Templar Publisher, 2020.
- Anjali Karolia, Traditional Indian Handcrafted Textiles, NiyogiBooks Publisher, 2019.
- Kristine Vejar, Adrienne Rodriguez, Journeys in Natural Dyeing, ABRAMS Publisher, 2020.

Journals:

- Journal of Indian Textile History
- Journal of Dress History
- Journal of Medieval History

E-Resources:

- https://en.wikipedia.org/wiki/History_of_clothing_in_India
- https://www.researchgate.net/publication/215757088_Traditional_indian_Costumes_and_Textiles
- https://www.researchgate.net/publication/215616545_Decorative_Design_History_In_Indian_Textiles_Costumes
- <https://www.slideshare.net/PriyalThakkar/fashion-history-of-india-56599569>
- <https://www.josbd.com/what-do-you-know-about-prehistoric-dress-or-costume/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	1	9	9	9	1	9	41

CO 2	3	3	3	9	3	3	3	27
CO 3	3	3	9	3	3	9	3	33
CO4	3	1	1	3	9	3	3	23
CO5	9	3	1	3	9	9	9	43
Total	21	11	23	27	33	25	27	167
	Low-1		Medium-3			High-9		

Skill Enhancement Course II –Draping Techniques in Fashion Practicals
(For Students Admitted from 2023 -24)

Semester: III

Hours/Week: 2

Subject Code: IBFDS34P

Credit: 2

Course Objectives:

1. To provide skills of draping and understand the human body proportion to get therequired shape and fit of the garments
2. To inculcate knowledge on basic patterns and draping skills in fashion

List of Experiments:

Draping Techniques:

(30 hours)

1. Introduction to draping and dress forms
2. Preparation of fabric and dress form for Draping
3. Draping of bodice blocks variation: Bustier, Asymmetric bodice, off shoulder design, halter.
4. Draping basic skirts-one-piece basic skirt, gored skirt, flared skirt, pleated skirt.
5. Draping collars- Peter pan and Shirt Collar
6. Draping Sleeves- plain, Kimono, Raglan Sleeve
7. Waistl i n e variation: Empire, lowered, pointed and princess bodice.
8. Draping aShirt for men

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Acquire the skills of draping on dress form by an introduction to terminology, understanding fundamentals and advanced techniques of draping

CO2: Identify about custom fitted, basic pattern to prepare many different styles

CO3: Analyze the various parts of the garments

CO4: Manipulate the basic draping into designer costumes drape

CO5: Develop the structure of a garment design using draping techniques

Text Books:

1. Francesca Sterlacci, Draping Techniques for Beginners, Laurence King Publishing, 2019
2. Danilo Attardi, Fashion Draping Techniques Vol. 1, Hoaki Books SL Publisher, 2021
3. Connie Amaden Crawford, The Art Of Fashion Draping, Bloomburly Academic, 2018

Reference Books:

1. Helen Joseph Armstrong-Susan P Ashdown, Draping for Apparel Design, Fairchild Books Publisher, 2021
2. Sally M DiMarco, Draping Basics, Bloomsbury Academic, 2016

3. Francesca Sterlacci, Draping Techniques for Beginners, Laurence King Publishing, 2019

Journals:

1. Textile Research Journal
2. International Design Journal
3. Journal of Pattern Making

E-Resources:

1. <https://style2designer.com/apparel/draping-mannequin/what-is-draping-technique- and-its-process/>
2. <https://fabricalchemist.com/2017/06/11/draping-3-sleeves/>
3. <https://www.universityoffashion.com/wp-content/uploads/2013/06/StraightSkirtSloper.pdf>
4. <https://www.universityoffashion.com/wp-content/uploads/2013/06/YokeDirndlSkirt.pdf>
5. <https://www.moodfabrics.com/blog/intro-to-draping-dress-form-muslin-basics/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	9	3	3	1	3	1	3	23
CO 2	3	3	3	3	3	1	1	17
CO 3	9	3	3	9	3	9	9	45
CO4	9	3	1	3	3	1	9	29
CO5	9	3	3	9	9	3	41	37
Total	39	15	13	25	21	15	23	151

Low-1
Medium-3
High-9

Skill Enhancement Course IV - Surface Embellishment Practicals

(For Students Admitted from 2023-24)

Semester: IV

Hours/week: 2

Subject code: IBFDS44P

Credit: 2

Course Objectives:

1. To impart practical knowledge in various surface ornamentation techniques
2. To equip the students to analyze suitable surface embellishment used on different products

List of Experiments:

(10 hours)

1. Introduction to embroidery stitches

2. Basic embroidery stitches

- a. Line stitches – running and its variation – whipped running – looped running –stepped thread –back stitch – stem stitch – couching.
- b. Loop stitches – chain stitch and its variations – detached – lazy daisy stitch –square chain
- c. Filling stitch – satin – long and short – seeding – French knot – fly stitch
- d. Cross stitch – herringbone
- e. Edging stitch

3. Surface ornamentation techniques (10 hours)

Applique work – cut work – patch work– bead – sequins – aari– zardozi.

4. Traditional embroidery: (10 hours)

- Kantha of Bengal
- Kashida of Kashmir
- Embroidery of Gujarat
- Phulkhari of Punjab
- Chikankari of Uttar Pradesh
- Kasuti of Karnataka

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the basic embroidery stitches and classifying the variations

CO2: Analyze the different methods of surface ornamentation techniques

CO3: Analyze the traditional embroideries of India

CO4: Recommend the appropriate surface embellishment techniques to enhance the value of home furnishing and apparel fabrics

CO5: Design and develop appropriate designs for embroidery in textile products

Text books:

- Kimberly Irwin, Surface Design for Fabric, Bloomsbury Academic Publisher, 2015
- Jessica Pile, Fashion Embroidery, Batsford Publisher, 2018

Reference books:

- Dorling Kindersley, Embroidery, DK Publisher, 2015
- Betty Barnden, Embroidery Stitch Bible, Search Press LTD Publisher, 2017
- Jessicapile, Fashion Embroidery, Batsford Publishing, 2018

Journals:

- Journal of Textile Science
- Journal of Surface Design
- Journal of Application Techniques

E-Resources:

- <https://thedesigncart.com/blogs/news/the-beautiful-details-of-surface-ornamentation>
- <https://thedesigncart.com/blogs/news/surface-ornamentation-history-and-types>
- <https://sosopoetry.blogspot.com/2018/08/fabric-surface-embellishment-techniques.html>
- <https://www.achievementlearn.com/cloth-surface-embellishment-techniques/>
- <https://archive.hs.iastate.edu/past-exhibits/on-the-surface-textile-embellishment-techniques/>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	3	1	1	3	1	1	13
CO 2	9	3	9	9	3	1	3	37
CO 3	9	9	9	9	3	3	3	45
CO 4	3	1	9	9	3	1	3	29

CO5	3	3	3	9	9	1	9	37
Total	27	19	31	37	21	7	19	161

Low-1
Medium-3
High-9

Skill Enhancement Course V – Boutique Management

(For Students Admitted from 2023-24)

Semester: V

Hours/Week: 2

Subject Code: IBFDS55P

Credit: 2

Course Objectives:

- 1.To manage the small-scale business establishment
- 2.To understand the marketing research and promotion

Unit I

(6 hours)

Introduction to Boutique: Boutique-definition-management Skills required setting up a boutique-identifying target market and customer-selection of boutique name-types of boutiques- low- end and high- end boutiques.

Unit II

(6 hours)

Infrastructure and Visual Merchandising: Choice of location and space management – infrastructure requirement -fashion accessories in boutique-boutique interior-visual merchandising-store layout -types of display-exterior display-interior display-tools for visual merchandising-signage-props-mannequins-fixtures and lightings.

Unit III

(6 hours)

Resource Management: Staffing-selection of generalists and specialists-Customer relationship management-Manpower planning-performance management-employee relations.

Unit IV

(6 hours)

Tools and Materials: Boutique marketing tools and promotional kit-material sourcing -book keeping for boutique and maintaining stock.

Unit V

(6 hours)

Financial Management: Project finance-cash control and cash flow analysis-managing and startup the boutique business-boutique visit-boutique project report.

Course Outcomes:

After successful completion of this course, student will be able to

- CO1:** Understand the structure of boutique, identifying the management processes
- CO2:** Interpret a boutique infrastructure requirements and visual merchandising techniques
- CO3:** Organize and manage the human resources
- CO4:** Analyze boutique marketing tools and material sourcing
- CO5:** Prepare the financial resources for a boutique

Textbooks:

- 1.Nada R,Sanders,Supply Chain Management,A Global Perspective,Wiley , Publishing,2020
- 2.Michel Chevalier, Michel Gutsatz,Luxury Retail and Digital Management, Wiley Publishing,2020

Reference books:

- 1.Sarah Bailey, Baker, Visual Merchandising for Fashion, Bloomsbury Publishing, 2021.
- 2.Mary G Wolfe, Fashion Marketing and Merchandising, Good Heard Wilcox Company Publisher, 2018.
- 3.Donna L Bade Export /Import Procedures and Documentation, American Management Association Publisher, 2015.

Journals:

- 1.Journal of Fashion Marketing and Management
- 2.Journal of Retailing
- 3.Journal of Global Fashion Marketing

E- Resources:

1. <https://retailminded.com/introducing-our-featured-boutique-section-she-boutique/#.YevfSNVByUk>
2. <https://www.business.qld.gov.au/industries/manufacturing-retail/retail- wholesale/retail-design/effective-displays/visual-merchandising>
3. <https://www.apm.org.uk/blog/what-is-resource-management/>
4. <https://smallbusiness.chron.com/equipment-need-start-clothing-store-10682.html>
5. <https://www.netsuite.com/portal/resource/articles/financial-management/financial-management.shtml>

Course Outcomes	Programme Outcomes							Total
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	
CO 1	3	1	1	1	3	3	9	27
CO 2	9	3	9	9	3	3	9	45
CO 3	3	1	9	3	3	1	9	29
CO4	3	1	3	3	3	9	3	25
CO5	3	1	3	3	1	1	3	15
Total	21	7	25	19	13	17	33	141

Low-1 Medium-3 High-9

Skill Enhancement Course VI – Fashion Styling Practicals

(For Students Admitted from 2023-24)

Semester: VI

Hours/Week: 2

Subject Code: IBFDS66P

Credit: 2

Course Objectives:

1. To instill students interest towards various beauty care regimes
2. To learn the different techniques of makeup and hairstyles

List of experiment

1. **Introduction to Fashion Styling:** Design collection and presentation on various styles of fashion. **(2hours)**
2. **Concept of Styling:** Color Matching, Accessories Coordination, Mix and match **(2hours)**

3. Hairdo: (10 hours)

- a) Highlighted Messy bun with Long Side – Swept Bang
- b) Side Fish-tail braided hairdo
- c) French braid
- d) French twist
- e) Poof voluminous ponytail

3. Eye Makeup: Classic, Smokey, Retro, Lashy, Golden shadow, Lens and shine. (4 hours)

4. Fashion theme makeover: (10 hours)

- a) Classic
- b) Retro
- c) Rustic
- d) Vibrant colors
- e) Dewy

5. Back Stage Activity of Various Events (Fashion shows, Advertisements, Cultural events, wedding): (2hours)

- a) Situation handling
- b) Technical tips – Ironing, Tacking, Quick stitches and draping.

Course Outcomes:

After successful completion of this course, student will be able to

CO1: Understand the skills to develop design capability in lifestyle, classifying the products and styles

CO2: Acquire the beauty products and identify recent trends

CO3: Cultivate aesthetic sensibilities and build on craftsmanship skills

CO4: Analyze the various events and situation handling

CO5: Develop personal grooming and makeup skills

Text Books:

1. Alexandra Fullerton, How to Dress, Pavilion Books Publisher, 2018
2. Christian Allaire, The Power of Style, Annick Press Publisher, 2021

Reference books:

1. Jacqueline McAssey, Sophie Benson, Clare Buckley, Fashion Styling, Bloomsbury Publisher, 2021.
2. Steph Adams, Fashion and Style, Amazon Digital Services LLC-KDP Print US Publisher, 2020.
3. Victoria Magrath, The New Fashion Rules, HarperCollins Publisher, 2018

Journals:

1. Journal of Styling
2. Journal of International Fashion Designing
3. Journal of Fashion Studies

E-Resources:

1. <https://alexandrastylist.com/define-stylists-what-do-they-really-do/>
2. https://www.medicinenet.com/what_are_the_four_types_of_hair/article.htm
3. <https://www.maybelline.com/eye-makeup>
4. <https://www.jdinstitute.edu.in/what-is-fashion-/>
5. <https://jdinstitute.co/why-is-fashion-styling-important/>

Course Outcomes	Programme Outcomes							
	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	Total
CO 1	9	3	3	9	9	9	9	51
CO 2	9	9	9	9	9	9	3	57
CO 3	3	9	9	9	9	3	3	45
CO4	9	9	9	3	3	1	1	35
CO5	9	9	9	3	3	3	9	45
Total	39	39	39	33	33	25	28	236

Low-1 Medium-3 High-9

CERTIFICATE PROGRAMME IN APPAREL DESIGNING & CONSTRUCTION

[For Students Admitted from 2023-24]

Programme Structure

S.No	Subject Code	Subject title	Duration	Contact Hours	Credit	External Marks
1.	FCAD11P	Apparel Designing & Construction Practicals	12 weeks	30	2	100
					Total	100

Subject Code: FCAD11P

Hours: 30

Course Objectives:

1. To impart knowledge on designing garments for women
2. To enable the students to practice skill in drafting, pattern making and construction of selected garment and calculating costing of product

Basic Apparel Designing

I. List of Experiments

(10 hours)

1. Sewing machine –parts and functions of a single needle machine
2. Seams and seam finishes types
3. Hemming and its types
4. Fullness –Yokes-Darts, tucks, pleats, flares, godets, gathers, shirrs frills and flounces
5. Plackets-facing and binding, piping.
6. Sleeves-type of sleeve-plain, puff, bell, circular, cap, Magyar, raglan and petal sleeves
7. Closures – fasteners – conspicuous –Button and button holes, button and loops, eyelets, Press buttons, hooks, eyes and zippers.

Pattern making and Garment Construction

II. List of Experiments

(20 hours)

Designing, drafting and constructing the following garments for the features prescribed List the Measurements required and Materials suitable Calculate the cost of the garment Calculate the material required –Layout method and direct measurements method

1. Bib- Variation in outline shape
2. Jabla- without sleeve, front open or Magyar sleeve, back opens
3. Frock- A-line frock, summer frock, yoke frock.
4. Skirt/midi-Circular/umbrella/panel with style variations.
5. Tops-Asymmetric bodies, neck variations, sleeve variations
6. Kameez - with/without slit, with or without flare, with /without opening, with or without panels, with /without yoke.
7. Salwar - Length width Variation
8. Saree blouse- front open, Princess cut, Fashioned neck, Waist band at front, with sleeve

Course Outcomes:

After successful completion of this course, student will be able to

CO1: State the functions of sewing machines and identify the parts

CO2: Interpret methods of drafting for different types of garments

CO3: Experiment the components of apparel designing.

CO4: Estimate the cost of the garment.

CO5: Create a various design in women's wear

TextBooks:

- 1.K.R Zarpker, Zarpker system of cutting, Navneet Publication ltd,2008
- 2.Claire Wargnier,Focuson Fashion Details, Volume 1,ESMOD Publishing, 2021

Reference Books:

- 1.Practicals Clothing Construction –Part I and II, MaryMathews, Cosmic Press, Chennai,1986
- 2.Sewing and Knitting – A Readers Digest, step- by – step guide, Readers Digest Pvt Ltd,Australia.
- 3.Laing R M and Webster J, –Stitches and Seamsl , The Textile Institute, 2006.

Journals:

1. Journal of Designing Comfort Garment for Children
2. Journal of Drafting Techniques
3. Journal of Sewing Guide

E-Resources:

1. <https://sewguide.com/sew-sari-petticoat/>
2. <https://sewguide.com/how-to-sew-skirts/>
3. <https://www.vibhasfashion.com/blouse-cutting-and-stitching>
4. <https://style2designer.com/pattern-cutting-cad-cam/cutting-sewing-techniques/straight-kameez/>
5. <https://sewguide.com/free-tunic-patter/>

