

B Sc TEXTILES AND FASHION DESIGN
SCHEME EVALUATION 2018-2019

SEM	Course code	Title of the course	Credit	Total contact Hours	CFA	ESE	TOTAL
I	18TAMU0101 18HIDU0101 18MALU0101 18FREU0101	Tamil Hindi Malayalam French	3	3	40	60	100
	18ENGU01F1	English	3	3	40	60	100
	18NSSU0001 18FATU0001 18SPOU0001	NSS Fine Arts Sports	1	1	20	30	50
	18YOGU0001	Yoga	1	1	20	30	50
	18EVSU0001	Environmental Studies	3+1	5	20	30	50
	18TFDU01A1	Elements of Fashion and Design	3	3	40	60	100
	18TFDU0101	Fiber and Yarn Science	3	3	40	60	100
	18TFDU0102	Sewing Techniques and Accessories	0+3	6	60	40	100
	18TFDU01F1	Field Placement - I	2	-	50	-	50
	Total		23	25			
II	18TAMU0202 18HIDU0202 18MALU0202 18FREU0202	Tamil Hindi Malayalam French	3	3	40	60	100
	18ENGU02F2	English	3	3	40	60	100
	18CHIU0001 18CTAU0001 18CMLU0001	Core Hindi Core Tamil Core Malayalam	2	2	20	30	50
	18GTPU0001	Gandhi's Life, Thought and Work	2	2	20	30	50
	18EXNU0001	Extension Education	2	2	20	30	50
	18ENGU00C1	Communication / Soft Skills	2	2	20	30	50
	18TFDU02A2	Fabric Structure	3	3	40	60	100
	18TFDU0203	Fashion Illustration (Practical)	0+3	6	60	40	100
	18TFDU0204	Grading and Draping Techniques (p)	0+2	4	60	40	100
	18TFDU02F2	Field Placement - II	2	-	50	-	50
	Total		24	27			
III	18TAMU0303 18HIDU0303 18MALU0303 18FREU0303	Tamil Hindi Malayalam French	3	3	40	60	100
	18ENGU03F3	English	3	3	40	60	100
	18CHIU0002 18CTAU0002 18CMLU0002	Core Hindi Core Tamil Core Malayalam	2	2	20	30	50
	18CSAU03A1	Computer Fundamentals and Automation	4	4	40	60	100
	18SHSU0001	Shanti Sena	1	1	50		50
	18EXNU03V1	VPP	2	-	50		50
	18TFDU03A3	Children's Apparel	0+3	6	60	40	100
	18TFDU0305	Wet Processing`	4+0	4	40	60	100
	18TFDU0306	Industrial Training-I	2	2	50	-	50

		Total	24	25			
IV		Non Major Elective	3	3	40	60	100
	18TFDU04A4	Surface Embellishment	0+3	6	60	40	100
	18TFDU04EX	Major Elective	3+0	3	40	60	100
	18TFDU0407	Textile Testing	3+0	3	40	60	100
	18TFDU0408	Women's Apparel (Practical)	0+3	6	60	40	100
	18TFDU0409	Apparel CAD(p)	0+3	6	60	40	100
	18TFDU0410	Industrial Training -II	2	2	50	-	50
		Total	20	29			
V	18TFDU05SX	Skill Based Elective	0+2	2	20	30	50
		Non Major Elective	3+0	3	40	60	100
	18TFDU05EX	Major Elective	3+0	3	40	60	100
	18TFDU0511	Home Textiles	0+3	6	60	40	100
	18TFDU0512	Men's Apparel (Practical)	0+3	6	60	40	100
	18TFDU0513	Portfolio Presentation	0+3	6	60	40	100
	18TFDU0514	Internship-I	2	2	50	-	50
		Total	19	28			
VI	18TFDU06MX	(Modular)	2	2	50	-	50
	18TFDU06MY	(Modular)	2	2	50	-	50
	185TFDU0615	Technical Textiles	4	4	40	60	100
	18TFDU0616	Entrepreneurship Development	3	3	40	60	100
	18TFDU0617	Historic costumes of India	3	4	40	60	100
	18TFDU0618	Project	4	8	40	40+20	100
	18TFDU0619	Internship II	2	2	50	-	50
		Total	20	25			
	Grant Total	130	159				

Major Electives

Course code	Title of the course	Credit	Contact hrs	CFA	ESE	TOTAL
18TFDU04E1	Textiles and Fashion Merchandising	3+0	3	40	60	100
18TFDU04E2	Garment Costing	3+0	3	40	60	100
18TFDU05E1	Recent Advance in Apparel Design	3+0	3	40	60	100
18TFDU05E2	Fashion Psychology	3+0	3	40	60	100

Skill Based Electives

Course code	Title of the course	Credit	Contact hrs	CFA	ESE	TOTAL
18TFDU05S1	Textile Crafts	0+2	2	20	30	50
18TFDU05S2	Soft Toy Making	0+2	2	20	30	50

Modular Courses

	Course code	Title of the course	Credit	Contact hrs	CFA	ESE	TOTAL
MX	18TFDU06M1	Care and Maintenance of Textiles	2	2	50	-	50
	18TFDU06M2	Wardrobe Planning	2	2	50	-	50
MY	18TFDU06M3	Quality Control Management	2	2	50	-	50
	18TFDU06M4	Basic Textile Economics	2	2	50	-	50

I Semester

ELEMENTS OF FASHION AND DESIGN

Course code: 18TFDU01A1

Credit :3+0

Max Mark:100

Objectives:

- To enable students to gain knowledge of design, textile design and fashion
- To understand the fashion design concept and process

Specific Learning Outcome:

After learning this paper the students will gain knowledge in design concepts and elements used for design creations and clothing concepts related to the design development.

Unit I

Design definition, classification, Elements of design- Silhouette, Line, colour, Texture, Principles of design - Proportion, Balance, Rhythm, Emphasis, Harmony, Colour theory- Prang and Munsel colour system, Hue, Value and intensity.

Unit II

Fashion – Definition, Classification, Terminologies- Style, Design, Trend, Classic, Fad, Features of fashion - Acceptance, Change, Source of fashion inspiration, Factors affecting fashion - Economic factors, Consumer income, Sociological factors, Psychological factors, Theories of fashion adoption- Trickle down or down ward flow theory, Trickle across of horizontal flow theory, Trickle up or upward flow theory, Fashion leaders, Fashion followers.

Unit III

Figure theory and analysis, types, Female body type - Pear body type, Diamond body type, Round body type, Hourglass body type, Inverted triangle body type, Straight body type, Male body type - Short and heavy body type, Tall and heavy body type, Short and thin body type, Tall and thin body type, Athletic body type, Figure types - Heavy figure, Thin, Slender, Narrow and Broad shoulder, Small face, Prominent chin and Jaw, Thick arm and Prominent forehead.

Unit IV

Clothing definition, classification- Production theory, Modesty theory, Adornment theory, Clothing communicates- Age, Sex, Marital status, Cultural influences, Physical appearance, Life style, Occupation, Economic status, Social status, Value and Attitudes, Political beliefs, Religious beliefs, Industrialization, Emotions, Interests.

Unit V

Fashion figure proportion- Learning figure basics, Drawing constant proportion, Guidelines, Upper Torso definition, Lower Torso definition, Fashion Elongation and the figure, Figure map- 8, 10, 12 head theory for men, women and children.

Text books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. Elements of fashion and apparel design-G.J. Sumathi
3. Elements of fashion and apparel design Sumathi 81-224-1371-4
4. Encyclopedia of dress making Raul Jewel
5. Stanyer, Peter, "The Complete Book of Drawing Techniques" – Arcturus Publishing Limited for Book Mart Limited 2003

References

1. Edith Tomory, "A History of Fine Arts' in India and the West" – Orient Longman Publishers 1982, reprinted 1999.
2. Hideaki Chijiwa, Colour harmony – "A Guide to creative colour Combination".
3. HelIn Goworek, "Drawing Course a step by sep Guide" Blackwell Publications.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Design definition, classification, Elements of design- Silhouette	3
	Silhouette, Line, colour, Texture	3
	Principles of design - Proportion, Balance, Rhythm	3
	Emphasis, Harmony, Colour theory	2
	Munsel colour system, Hue, Value and intensity.	2
II	Fashion – Definition, Classification, Terminologies- Style, Design, Trend, Classic, Fad	3
	Features of fashion - Acceptance, Change, Source of fashion inspiration	2
	Factors affecting fashion - Economic factors, Consumer income, Sociological factors, Psychological factors	3
	Theories of fashion adoption- Trickle down or down ward flow theory, Trickle across of horizontal flow theory	2
	Trickle up or upward flow theory, Fashion leaders, Fashion followers.	2
III	Figure theory and analysis, types, Female body type - Pear body type, Diamond body type, Round body type, Hourglass body type	3
	Inverted triangle body type, Straight body type, Male body type - Short and heavy body type, Tall and heavy body type,	3
	Short and thin body type, Tall and thin body type, Athletic body type, Figure types - Heavy figure, Thin, Slender, Narrow	3
	Broad shoulder, Small face, Prominent chin and Jaw, Thick arm and Prominent forehead.	2

IV	Clothing definition, classification- Production theory, Modesty theory, Adornment theory,	4
	Clothing communicates- Age, Sex, Marital status, Cultural influences, Physical appearance, Life style, Occupation, Economic status, Social status	4
	Value and Attitudes, Political beliefs, Religious beliefs, Industrialization, Emotions, Interests.	3
V	Fashion figure proportion- Learning figure basics,	2
	Drawing constant proportion, Guidelines	2
	Upper Torso definition, Lower Torso definition, Fashion Elongation	3
	the figure, Figure map- 8. 10,1 2 head theory for men, women and children.	2
	Total hours	57

FIBER AND YARN SCIENCE

Course code: 18TFDU0101

Credit :3+0

Max Mark:100

Objectives:

- To impart the knowledge of fibres, sources, their identification and properties

- To provide students with, the knowledge of yarn science and their properties.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in different types of textile fibers, origin, its classifications and properties. They will be able to identify different fibre types based on its physical and chemical parameters. They will gain knowledge in different methods involved in spinning process of fibers as well as different types of yarn.

Unit I

Textile fibers- Definition of textile fibers, Classification of textile fibers, Natural fiber, Man made fiber, Basic units of fibers – Monomers and Polymers, Polymerisation, Degree of polymerisation, Types of polymers, Inter polymer bonds in textile fiber, Fiber morphology, Properties of textile fibers- Primary and Secondary.

Unit II

Natural fibers- Definition, Classification, Natural cellulosic fibers, Cotton, Flax, Jute, Other cellulosic fiber – Coir, Bamboo, Ramie, Hemp, Kenaf, Pina, Abaca, Sisal, Kapok, Banana and its properties, Natural protein fibers – Wool, Silk, other natural fibers- Rubber, Asbestos.

Unit III

Man made fibers- Definition, Classification - Production of man made fiber - Wet spinning, Dry spinning, Melt spinning, Classification of man made fibers, Fibers from natural polymers- Viscose Rayon, Cuprammonium Rayon, Acetate, Fibers from synthetic polymers - Acrylic, Polyamide fibers - Nylon, Aramids, Polyolefins, Elastomer fibers- Rubber, Elastane (Spandex fiber), Inorganic fibers- Glass, Carbon.

Unit IV

Yarn – Definition- Classification- Process of yarn construction, Spun yarns, Conventional yarn spinning, Un conventional yarn spinning, Filament yarn- spun yarns from filament fibers, Yarn number or Yarn count – Direct system, Indirect system, measurement of yarn count, Yarn Twist – Direct twist, Amount of twist, Balance of the yarn, Functional of twist.

Unit V

Yarn structure – Simple yarn, Complex yarn, Textured yarns – Airjet texturing, False twist texturing, Sewing threads, Essential qualities of good sewing thread, Classification of sewing threads, Difference between a thread and a yarn, Yarn defects.

Text Books

1. Text book- Textile Science- Deepali Rastogi, Sheetal Chopra.
2. E.P.G. Gohl, L.D. Velensky, “Textile Science” CBS Publishers and Distributors, 2003
3. Seema sekhri “Fabric science” 978-81-203-4183-8
4. Kanwar varinder “Fabric studies” 81-272-1904-58
5. Druid “Fabric textile and patterns” 9789057681127
6. Barker “Hand book of textiles”
7. Jaistree “Hand book of textiles” 978-81-7132-717-

References

1. AJ. Hall. “The standard hand book of Textiles”, Wood head Publishing 8th edition 2004.
2. P.V. Vidyasagar, “Hand Book of Textiles”, A. Mittal Publications, 2005
3. Sara J. Kadolph, “Textiles”, Prentice Hall, 10th edition 2007
4. J. Gordon Cook, “Hand Book of Textile Fibres”, Vol – IT Man Made Fibers, Wood Head Publishing
5. Murphy “Preparation of textile of fibres” 81-85733-75-9
6. Susile dantayayi “Fundamentals of textile and their care” 978-81-250-1027-2
7. Bernard P. Corbman, “Textiles Fiber. to Fabric” McGrawhill Publications, 6th Edition 1983

Lecture Schedule

Unit	Topics to be covered	Hours
I	Textile fibers- Definition of textile fibers, Classification of textile fibers, Natural fiber, Man made fiber.	3
	Basic units of fibers – Monomers .and Polymers, Polymerisation, Degree of polymerisation	3
	Types of polymers, Inter polymer bonds in textile fiber, Fiber morphology	3
	Properties of textile fibers- Primary and Secondary.	2
II	Natural fibers- Definition, Classification, Natural cellulosic fibers, Cotton, Flax, Jute	3
	Other cellulosic fiber – Coir, Bamboo, Ramie, Hemp, Kenaf, Pina, Abaca, Sisal, Kapok, Banana	3
	its properties, Natural protein fibers – Wool, Silk, other natural fibers- Rubber, Asbestos.	3

III	Man made fibers- Definition, Classification - Production of man made fiber - Wet spinning	2
	Dry spinning, Melt spinning, Classification of man made fibers	2
	Fibers from natural polymers- Viscose Rayon, Cuprammonium Rayon, Acetate	3
	Fibers from synthetic polymers - Acrylic, Polyamide fibers - Nylon, Aramids, Polyolefins	3
	Elastomeri fibers- Rubber, Elastane (Spandex fiber), Inorganic fibers- Glass, Carbon.	2
IV	Yarn – Definition- Classification- Process of yarn construction, Spun yarns, Conventional yarn spinning	3
	Un conventional yarn spinning, Filament yarn- spun yarns from filament fibers	2
	Yarn number or Yarn count – Direct system, Indirect system, measurement of yarn count	2
	Yarn Twist – Direct twist, Amount of twist, Balance of the yarn, Functional of twist.	2
V	Yarn structure – Simple yarn, Complex yarn, Textured yarns – Airjet texturising, False twist texturing	3
	Sewing threads, Essential qualities of good sewing thread,	2
	Classification of sewing threads, Difference between a thread and a yarn, Yarn defects.	3
	Total hours	49

SEWING TECHNIQUES AND ACCESSORIES

(Practical)

Course code:18TFDU0102

Credit :0+3

Max. Marks:100

Objectives:

- To impart skills in basic techniques of pattern making.
- To provide the knowledge of different machines used for sewing.
- To impart pattern making and grading skills to the students.
- Lay a foundation for pattern development, pattern grading and pattern grading skills.

Specific Learning Outcome:

By learning this paper the students will gain knowledge in taking measurements for preparing metric patterns and commercial patterns. They will acquire knowledge in different pattern manipulation techniques and style development. This paper will give way to understand parts and functions of a basic sewing machine and they will be able to know the mechanism and how to take care of a sewing machine. The students will also know to stitch starting from a simple seam to complex collars and yokes.

Unit I

Sewing Techniques: Definition-Sewing, Introduction to types of sewing machines, parts and functions of sewing machines, single needle, double needle, over lock machine, button hole machine, button fixing machine – their suitability and function, commonly used and special attachments in sewing machine.

Unit II

Stitches: Basic hand stitches – Basting, running, hand overcast, buttonhole, Hemming stitches – plain and blind hemming and slip stitch. Seams – plain, edge, single top, double top, Flat fell, French seam, lapped, piped, slot. Seam finishes- pinked, overcast, edge, herring bone.

Unit III

Fullness and Yokes: Fullness – Darts, tucks, pleats, gathers and style line. Yokes – and its types- Simple round Yoke, Full round yoke, Straight yoke, Square yoke, Pentagonal yoke , Side yoke , Yoke with and without Fullness.

Unit IV

Sleeves and Collars: Sleeves – Plain, puffed, Raglan, Kimono, Bell sleeves, Butterfly, Cap, Angel, Bracelet, Cuff , Half, Long, Petal, and Slit Sleeves. Collars – Peter pan, shawl, Shirt collar, Wing, Notched, Sailor, Ruff, Puritan and Mandarin.

Unit V

Fasteners and Neckline Finishes: Fasteners – Press button, hook and eye, shirt button, button hole and zips. Finishes – Neckline finishes – Facing, shaped, piping / binding, placket finishing – continuous one piece, two piece bound placket.

Text Books

1. Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall
2. Pattern + palette – 2Arrizabalaga
3. Pattern cutting and making up Martin .M,shoben 81-239-1373-7
4. Pattern cutting and making up Martin81-239-1373-7
5. Pattern Making of fashionAmstrong 978-81-317-2459-0, 978-317-2459

References

1. Harold Carr & Barbara Lathem, The Technology of Clothing Manufacture, Oxford Pub, USA, 1994
2. Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
3. Metric Pattern cutting & Grading by Winfred Aldrich.
4. Bane Allyne, Flat pattern design. M.C. Graw – Hill Pub. USA
5. Winfred Aldrich, “Metric Pattern Cutting”. Black Well Science. UK
6. Helen J. Armstrong, “Pattern Making for fashion design” Prentice Hall

Lecture Schedule

Unit	Topics to be covered	Hours
I	Sewing Techniques: Definition-Sewing, Introduction to types of sewing machines, parts.	3
	Functions of sewing machines, single needle, double needle	3
	over lock machine, button hole machine, button fixing machine.	3
	Suitability and function, commonly used and special attachments in sewing machine.	3
II	Stitches: Basic hand stitches – Basting, running, hand overcast, buttonhole, Hemming stitches – plain and blind hemming and slip stitch.	5
	Seams – plain, edge, single top, double top, Flat fell, French seam, lapped, piped, slot.	4
	Seam finishes- pinked, overcast, edge, herring bone	3
III	Fullness and Yokes: Fullness – Darts, tucks, pleats, gathers and style line.	4
	Yokes –and its types- Simple round Yoke, Full round yoke	4
	Square yoke, Pentagonal yoke , Side yoke , Yoke with and without Fullness.	4
IV	Sleeves and Collars: Sleeves – Plain, puffed, Raglan, Kimono, Bell sleeves, Butterfly, Cap.	4
	Angel, Bracelet, Cuff , Half, Long, Petal, and Slit Sleeves	4

	Collars – Peter pan, shawl, Shirt collar, Wing, Notched, Sailor, Ruff, Puritan and Mandarin.	5
V	Fasteners and Neckline Finishes: Fasteners – Press button, hook and eye, shirt button, button hole and zips.	4
	Finishes – Neckline finishes – Facing, shaped, piping / binding,	4
	placket finishing – continuous one piece, two piece bound placket.	3
	Total hours	60

FIELD PLACEMENT-I

Course code: 18TFDU01F1

Credit:2

Max.Marks:50

Specific Learning Outcome:

Based on the theory discussed in first semester, all students placed in field exposure during semester break. After successful completion of a field visit in textile manufacturing units and processing units the student will have a complete commercial knowledge on textiles, and also on the latest machineries and equipments.

Field Visit:

From a practical point of view, this approach also seems like it might be a very useful way to document the process of getting to grips with the literature on a subject – helping immensely when it comes to putting together. We have one week/ two week exposure visit at the beginning of first semester. During second semester, the students undertake needs assessment exercise at various textile/ fashion field sites. Documentation in the form of report should be submitted by the candidates for evaluation purpose. The field training component is spread over in all academic institutes to place the successful candidates.

II Semester
FABRIC STRUCTURE

Course code: 18TFDU02A2

Credit: 3+0

Max. Marks:100

Objectives:

- To impart knowledge of fabric manufacture and fabric characteristics
- To enable students to understand fabric structures and to analyze them.

Specific Learning Outcome:

After learning this paper the students will be able to design textile fabrics i.e. woven, knitted and non woven fabrics manually. They will acquired knowledge in different types of looms, loom parts and mechanisms of different looms, both handloom and power loom. The students will know the different types of knitting machines, knitting machine parts and functions, as well as they will be able to design knit fabrics.

Unit I

Weaving- Definition- Classification, introduction to fabric manufacturing technology- sequence of preparatory process for weaving and its objectives- sizing, weft winding, warping. Passage of material through weaving machine (loom)- study of looms- different types of loom- important motions of weaving- shedding, picking, beat-up and let-off, take up motions- hand loom, power loom, shuttle loom, shuttle less loom.

Unit II

Woven fabric and design- general characteristics of woven fabric, elements of woven design- design, draft plan, peg plan. Basic weave design- Plain weave and its derivatives. Twill weaves- types, Satin and Sateen weaves. Crepe weave, Honey comb weave, Huck a back weaves, Mock leno, Extra warp and Extra weft. Dobby and Jacquard weave structure and types.

Unit III

Knitting- definition, Classification, terms used in knitting, knitting elements- types and its mechanism, knitting machine types- flat bed and circular knitting machine- mechanism. Warp and Weft knitting- principle, types- structure, properties and uses. Comparison of warp and weft knitting. Study on Jacquard knitting.

Unit IV

Non woven- definition, Methods of manufacturing- web formation- types and mechanism. Fabric formation- bonding- mechanical, chemical and thermal bonding- types and mechanisms. Comparison between weaving, knitting and non woven. Comparison between woven, knitted and non woven fabrics, characteristics and end uses.

Unit V

Decorative fabric construction, Bonding- Braiding and types- Two dimensional braiding, Circular braiding mechanism, 3D braiding, Horn gear braiding, Cartesian, Bonded fabrics Netting, Lace, Knotting, Crocheting, Embroidery, Felting- its characteristics and end use.

Text Books

1. Ormerod A, "Modern Preparation and Weaving machiner", Woodhead Publication, 2004
2. Chitra, chowdhary "Textile design and structure" 978-81-8342-298-7
3. Charu samy "Textile design theory" 978-81-224-3053-0
4. Tanya jain "Textile designing theory and concept"
5. Frank Ames "Woven master recipes of Sikh heritage"
6. W.S. Murphy, "Textile Weaving & Design", Abhishek Publication, 2003
7. J. Gordon Cook, Hand Book of textiles Fibers Vol I & II", Woodhead Publication

References

1. Amjden C.A "Navaho Weaving Its techniques and History", Abhishek Publication.
2. Z.J. Grosicki, "Watson's Textile Design & Colour, 7th Edition Woodhead Publication.
3. W.S. Murphy, "Handbook of weaving" Abhishek Publication.
4. Deborah Chnadler, "Learning to weave", Interweave Press, 1995.
5. J.J. Pizzuto, "Fabric Science" 6th Edition, Fairchild Publications.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Weaving- Definition- Classification, introduction to fabric manufacturing technology- sequence of preparatory process for weaving.	3
	sizing, weft winding, warping. Passage of material through weaving machine (loom)- study of looms- different types of loom	4
	important motions of weaving- shedding, picking, beat-up and let-off, take up motions- hand loom, power loom, shuttle loom, shuttle less loom.	4
II	Woven fabric and design- general characteristics of woven fabric, elements of woven design- design, draft plan, peg plan.	4
	Basic weave design- Plain weave and its derivatives. Twill weaves- types, Satin and Sateen weaves.	3
	Twill weaves- types, Satin and Sateen weaves. Crepe weave, Honey comb weave, Huck a back weaves, Mock leno, Extra warp and Extra weft.	4
III	Dobby and Jacquard weave structure and types.	3
	Knitting- definition, Classification, terms used in knitting, knitting elements- types and its mechanism,	3
	knitting machine types- flat bed and circular knitting machine- mechanism.	3
	Warp and Weft knitting- principle, types- structure, properties and uses	3

	Comparison of warp and weft knitting. Study on Jacquard knitting.	3
IV	Non woven- definition, Methods of manufacturing- web formation- types and mechanism.	3
	Fabric formation- bonding- mechanical, chemical and thermal bonding- types and mechanisms.	3
	Comparison between weaving, knitting and non woven. Comparison between woven, knitted and non woven fabrics, characteristics and end uses.	4
V	Decorative fabric construction, Bonding- Braiding and types- Two dimensional braiding, Circular braiding mechanism,	4
	3D braiding, Horn gear braiding, Cartesian, Bonded fabrics Netting, Lace, Knotting, Crocheting, Embroidery, Felting- its characteristics and end use.	4
	Total	55

FASHION ILLUSTRATION

(Practical)

Course code: 18TFDU0203

Credit:0+3

Max Mark:100

Objectives:

- To enable the students to familiarize with fashion designing and illustration techniques.
- Acquaint with the steps involved in drawing and to gain skill in illustration and design garments for personal / individual taste.

Specific Learning Outcome:

Sketching is an important skill that is required by a fashion designer, textile designer or a graphic designer. After completion of the course the students will have hands on skills in sketching, colouring, rendering and various other techniques involved in sketching. They will be able to illustrate human figures in different postures and garments.

Unit I

Basic human proportion, Anatomy and model drawing, 8, 10, 12 head theory, Straight, Flesh, Motion posture, Elongation figure, Body figures and features- Hair styling, Eye, Face, Arm, legs, Figure drawing, Body Movement – Kids, Female and Male, Hand movement, Face drawing and detailing, Full fledged fashion figure front view, back view and different angle.

Unit II

Garment details- Collars- varieties, Cuffs- varieties, Sleeves- varieties, Yokes- varieties, Neckline- varieties, Pockets- varieties, Style manipulation, Illustration of shirt- varieties, Trouser -varieties, Gown -varieties, Frocks- varieties , Skirt- varieties, Jacket- varieties, Sketching- folds and Curves of different fabric drapes.

Unit III

Rendering Techniques- Pencil, and Colour pencil, Charcoal, Water colour, Poster colour, Oil and Acrylic, Fabric rendering of different varieties of fabrics, Prints, Woven's, Knit, Wool, Fur, Lustrous, Dark, Sheer, lace, Embellishment etc.

Unit IV

Photo analysis- different garments of kids, Male and Female, Experimenting with collage as a method of illustration, Croquis and Flat sketches, Male, Female and Kids, development of costume on croquis using elements of fashion.

Unit V

Theme board and Mood board creation and definition- Portfolio presentation using rendering techniques, Product development through fashion illustration in apparel and accessories.

Text Books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. Advanced Fashion Sketch Book, Bina Abling, OM Book Service,India (2007)
3. Basic fashion design Styling 978-2-940411-39-9
4. Sapna sarkas “Fashion and sketch book” 978-93-81031-39-1
5. Harold Carr “Fashion design and product development”
6. Fashion Design illustration Children Ireland
7. verekes “Fashion designers hand book for adobe illustration Centers” 978-1-4051-6055-1
8. Anmol Roy “Fashion designing and technologies” 978-81-8411-304-4
9. Figure Drawing for Fashion, Isao Yajima, Graphic-Sha; First Edition (1987)
10. Fashion Art for the Fashion Industry, Rita Gersten, Fairchild Books (1989)

References

1. Fashion Illustration Flat drawing
2. Eugeniakim “Saturday night ha”t0-307-33794-4
3. Tatham Seamas, “fashion design drawing course” 978-0-7641-2473-0
4. Fashion Drawing – The Basic Principles, Anne Allen and Julian Seaman, Anova Books.
5. Fashion illustration and Presentation, Manmeet Sodhia, Kalyani Publishers.
6. Fashion Source Book, Kathryn Mckelvey, Blackwell Science
7. Encyclopedia of fashion details, Patrick John Ireland, Batsford.
8. Fashion Illustration, Colin Barnes, Little Brown and Co. (UK) (April 1995).
9. Snap Fashion Sketch Book, Bill Glazer , Prentice Hall; 2 edition (2007).

Lecture Schedule

Unit	Topics to be covered	Hours
I	Basic human proportion, Anatomy and model drawing, 8, 10, 12 head theory, Straight, Flesh, Motion posture, Elongation figure	5
	Body figures and features- Hair styling, Eye, Face, Arm, legs, Figure drawing,	5
	Body Movement – Kids, Female and Male, Hand movement, Face drawing and detailing	4
	Full fledged fashion figure front view, back view and different angle.	4
II	Garment details- Collars- varieties, Cuffs- varieties, Sleeves- varieties, Yokes- varieties, Neckline- varieties,	4
	Pockets- varieties, Style manipulation, Illustration of shirt- varieties, Trouser –varieties	4
	Frocks- varieties , Skirt- varieties, Jacket- varieties, Sketching- folds and Curves of different fabric drapes.	4
	Rendering Techniques- Pencil, and Colour pencil, Charcoal, Water colour, Poster colour, Oil and Acrylic	5

III	Fabric rendering of different varieties of fabrics, Prints, Woven's, Knit, Wool, Fur, Lustrous, Dark, Sheer, lace, Embellishment etc.	5
IV	Photo analysis- different garments of kids, Male and Female, Experimenting with collage as a method of illustration,	5
	Croquis and Flat sketches, Male, Female and Kids, development of costume on croquis using elements of fashion	5
V	Theme board and Mood board creation and definition- Portfolio presentation using rendering techniques	5
	Product development through fashion illustration in apparel and accessories.	5
	Total	60

GRADING AND DRAPING TECHNIQUES

(Practical)

Course code: 18TFDU0204

Credit: 0+2

Max. Marks:100

Objectives:

- To teach the students the basics principles, and interpret and analyze complex drapes
- To enable students to create their original designs on a three dimensional form using draping method.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in basic bodice block, and bodies parts, developing various parts of the garment using draping techniques.

Unit I

Study of body measurements, importance of body measurements, standard measurements chart for all age groups. Standard measuring techniques- commercial patterns for all age groups and its application in pattern making.

Unit II

Methods of pattern making definition- drafting, principles of drafting. Steps in drafting children's, adults bodice and sleeve patterns. Flat pattern techniques- definition, pivot, slash and spread method. Dart manipulation- slash and spread, pivot transfer technique.

Unit III

Layout definition, layout planning- types of layout, merits and demerits of layout, marking, assembling. Fitting- definition, principles of good fit, causes for poor fit, checking the fit of a garment, fitting techniques. Pattern alteration- importance of altering patterns, principles of pattern alteration.

Unit IV

Grading- definition, types of manual and computerized. Manual- master grade basic back, basic front, basic collar and basic facing and grading. Computerized grading technology- information flow, system description.

Unit V

Draping- importance of draping- the dress form and its types. Draping steps for basic bodice, skirt, pants and intimates. Various intimates for men, women, adolescence and kids, intimate garments- introduction, material used and types of fitting for men's innerwear briefs and truck. Women's inner wears.

Text Books

1. Draping for Fashion Design, Hilde Jaffe, Nurie Relis.
2. Dress Design – Draping and Flat Pattern, Hill House MS, Houghton Mifflin Co, London, USA.
3. The theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.

References

1. Design through Draping, Sheldon, Marhta, Burgers Publishing company, Minneapolis, USA.

2. Modern Pattern Design, Popin, Hariet, Funk and Wagnalls, New York and London.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Study of body measurements, importance of body measurements, standard measurements chart for all age groups.	3
	Standard measuring techniques- commercial patterns for all age groups and its application in pattern making.	3
II	Methods of pattern making definition- drafting, principles of drafting. Steps in drafting children's, adults bodice and sleeve patterns.	4
	Flat pattern techniques- definition, pivot, slash and spread method. Dart manipulation- slash and spread, pivot transfer technique.	4
III	Layout definition, layout planning- types of layout, merits and demerits of layout, marking, assembling.	4
	Fitting- definition, principles of good fit, causes for poor fit, checking the fit of a garment, fitting techniques.	4
	Pattern alteration- importance of altering patterns, principles of pattern alteration.	4
IV	Grading- definition, types of manual and computerized. Manual- master grade basic back, basic front,	4
	Basic collar and basic facing and grading.	4
	Computerized grading technology- information flow, system description.	3
V	Draping- importance of draping- the dress form and its types. Draping steps for basic bodice, skirt, pants and intimates	5
	Various intimates for men, women, adolescence and kids, intimate garments- introduction, material used and types of fitting for men's innerwear briefs and truck. Women's inner wears.	5
	Total	47

FIELD PLACEMENT –II

Course code: 18TFDU02F2

Credit:2

Max.Marks:50

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Field Visit:

From a practical point of view, this approach also seems like it might be a very useful way to document the process of getting to grips with the literature on a subject – helping immensely when it comes to putting together. We have one week/ two week exposure visit at the beginning of first semester. During second semester, the students undertake needs assessment exercise at various textile/ fashion field sites. Documentation in the form of report should be submitted by the candidates for evaluation purpose. The field training component is spread over in all academic institutes to place the successful candidates.

III Semester

CHILDRENS APPAREL (Practical)

Course code: 18TFDU03A3

Credit: 0+3

Max. Marks:100

Objectives:

- To impart the knowledge in drafting and garment construction for children's wear.
- To impart and develop creative skills in designing and constructing children's wear for different age groups.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for Children independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire.

Unit I (each one construct 5 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Infant Jabla, napkin, Towels for 0-1 years, Accessories - Infant bed, feeding bottle cover, Infant Bib, panty for 2-3 years.

Unit II (each one construct 5 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Waist line frock for girl 2-4 years, Stapled petticoat, Baby A-line frock with variation of sleeve, yoke, pockets etc. 3-5 years.

Unit III (each one construct 5 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Flared frock with Magyar sleeve 6-12 years with variation of tucks, gathering, pleates.

Unit IV (each one construct 5 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Night wears for boys and girls 2-6 years with variation of neck design and pockets

Unit V (each one construct 5 varieties)

Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Knickers, shorts, Bush shirt, T-shirt, slack shirt 6-8 years preparatory models and construct os any two garments.

Text Books

1. Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai (1986)
2. Zarakker System of Cutting- Zarakker. K. R, Navneet Publications Ltd.
3. Practical cutting and tailoring part II Eshwasri Anwahi, Lakhraj Hans R.B Publications, Delhi

References

1. Advanced drafting and draping Manmeet Sodhia
2. Metric pattern cutting for children's wear and babies wear Winifred Aloric
3. Singer sewing for children.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Infant Jabla, napkin,	6
	Towels for 0-1 years, Accessories - Infant bed, feeding bottle cover, Infant Bib, panty for 2-3 years.	6
II	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Waist line frock for girl 2-4 years	6
	Stapled petticoat, Baby A-line frock with variation of sleeve, yoke, pockets etc. 3-5 years.	6
III	Designing, patternmaking, layout planning, marking, cutting and finishing the garments,	4
	Flared frock with Magyar sleeve 6-12 years with variation of tucks, gathering, pleates.	6
IV	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Night wears for boys and girls 2-6 years with variation of neck design and pockets	6
V	Designing, patternmaking, layout planning, marking, cutting and finishing the garments, Knickers, shorts,	5
	Bush shirt, T-shirt, slack shirt 6-8 years preparatory models and construct os any two garments.	5
	Total	50

WET PROCESSING

Course code: 18TFDU0305

Credit: 4+0

Max. Marks:100

Objectives:

- To impart knowledge of textile and garment wet processing
- To introduce students to various chemicals, dyes and auxiliaries used for chemical processing.
- To impart the knowledge of textile coloring and various printing methods to the students.
- To bring an awareness on the industrial techniques of dyeing and printing

Specific Learning Outcome:

After learning this paper the students will gain thorough knowledge in Wet Processing of textile materials. They will be able to classify different finishing processes of textiles, preparatory process and different bleaching process. They will know different dyeing process, dyeing equipments, printing process, laundering process, soap and detergent manufacturing process, Fusing technology and fusing process.

Unit I

Wet processing- definition- classification- Basic preparatory process of finishing- Degumming, singeing, desizing, scouring, bleaching, stiffening, mercerization, carbonizing, Enzymatic process. Equipments and machineries used for various types of finish suitable for various fibers wet processing.

Unit II

Dyeing- Introduction to dyeing, classification of dyes- natural. Origin of natural dyes, Raw material, selection, Extraction (understanding concepts) mordant and mordant techniques. Synthetic dyes– direct, basic, acid, vat, reactive and disperse dyes, sulfur. Methods of dyeing- stock, top, yarn, piece, dope, garment dyeing.

Unit III

Printing methods- Definition-Classification-Styles-Direct-Screen, Block, Roller, Rotary, Transfer, Discharge- white and coloured, Resist- stencil, Tie and dye, Batik. Identification of dyeing and printing defects.

Unit IV

Finishes – definition, classification of textile finishes, purpose of finishing. Mechanical finishes- Calendaring, Durable press, Embossing, Napping, Shearing, Decating, Sanforizig, Sueding, Giggig, Beetting, Schrenrising, Stone wash, Tentering, Nano and microencapsulation process.

Unit V

Chemical finishes- Definition, types, Antiseptic, Antistatic, Antislip, Flame Retardant, Water Repellent, Stain Resistant, Water Proof. Moth proof, Anti Microbial, Plasma Finishes.

Text Books

1. A.J.Hall “The Standard Hand Book of “Textiles”, Woodhead Publication, 2004
2. Natural dyeing Jackie crooks 978-1-85675-280-0
3. Needles: tufted couplet textile fiber dyes 978-93-80931-82-1
4. Textile chemical processing Jaitendra kumar 8190402558
5. Textiles and Laundry Poonam Sinha
6. Toxicity of Dyes and Intermediates Shenai
7. Dyeing printing and finishing Hust silk 81-8247-007-2
8. J.E. Smith “Textile Processing – Printing, Dyeing, Abhishek Publishing 2003

References

1. Kate B Broughton, Textile Dyeing”, Rockport publishers, 1996.
2. W.S. Murphy, “Textile Finishing”, Abhishek Publication, 2000.
3. Rosi Robinson, “Creative Batik”, Search Press, 2004
4. Janice Gunner, “Shibori for textile Artists”, Batsford London
5. 1.Textiles – Ninth edition ,Sara J Radolph and Anna L Langford, Prentice hall, New Jersey (2002).
6. Textile processing – J L Smith, Abhishek publications, Chandigarh (2003).
7. Textile Chemistry – Peters R H , Vol I, & II, Textile Institute Manchester (1970)
8. Beginners Guide to fabric dyeing and printing – Stuart & Robinson, Technical books,London (1982).
9. Thickening agents and Emulsion thickenings in textile printing – Herbert Barthm, New Delhi (1994).

Lecture Schedule

Unit	Topics to be covered	Hours
I	Wet processing- definition- classification- Basic preparatory process of finishing- Degumming, singeing, desizing, scouring	3
	bleaching, stiffening, mercerization, carbonizing, Enzymatic process.	3
	Equipments and machineries used for various types of finish suitable for various fibers wet processing.	4
II	Dyeing- Introduction to dyeing, classification of dyes-natural.	6
	Origin of natural dyes, Raw material, selection, Extraction (understanding concepts) mordant and mordant techniques.	3
	Synthetic dyes– direct, basic, acid, vat, reactive and disperse dyes, sulfur	3
	Methods of dyeing- stock, top, yarn, piece, dope, garment dyeing	3
	Printing methods- Definition-Classification-Styles-Direct-Screen, Block, Roller, Rotary,	4
	Transfer, Discharge- white and coloured, Resist- stencil,	4

III	Tie and dye, Batik. Identification of dyeing and printing defects	4
IV	Finishes – definition, classification of textile finishes, purpose of finishing	3
	Mechanical finishes- Calendaring, Durable press, Embossing, Napping, Shearing, Decating, Sanforizig,	3
	Sueding, Giggig, Beetting, Schrenrising, Stone wash, Tentering,	3
	Nano and microencapsulation process.	3
V	Chemical finishes- Definition, types, Antiseptic, Antistatic, Antislip, Flame Retardant,.	4
	Water Repellent, Stain Resistant, Water Proof. Moth proof, Anti Microbial, Plasma Finishes	4
	Total	57

INDUSTRIAL TRAINING-I

Course code: 18TFDU0306

Credit:2

Max.Marks:50

Objectives:

- To expose students to experience and knowledge which is required in industry, where these are not taught in the lecture rooms.
- To apply the knowledge taught in the lecture rooms in real industrial situations.
- To use the experience gained from the 'Industrial Training' in discussions held in the lecture rooms.
- To get a feel of the work environment.
- To gain experience in writing reports in works/projects.
- To expose students to the responsibilities and work ethics.
- With all the experience and knowledge acquired, it is hoped at the students will be able to choose appropriate work upon graduation.

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Industrial Training

Industrial Training refers to work experience that is relevant to professional development prior to graduation. One of the requirements for the award of Bachelor of Science is that students must complete at least 2 weeks of Industrial Training. Industrial Training is normally accumulated during the semester breaks at the end of the second year. Students should note that Industrial Training is an essential component in the development of the practical and professional skills required of a candidate and an aid to prospective employment. Many employers regard this period as a chance to vet new employees for future employment.

All students should make considerable effort and give sufficient thought into obtaining the most relevant and effective Industrial Training. Whilst difficult, it is desirable to obtain experience in a range of activities, such as e.g. design office, laboratory and on-site situations. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience.

IV Semester
SURFACE EMBELLISHMENT
(Practical)

Course code: 18TFDU04A4

Credit: 0+3

Max. Marks:100

Objectives:

- To impart knowledge on various traditional embroideries of India
- To gain practical knowledge on different embroideries of India.

Specific Learning Outcome:

After completing this course the students will know how to stitch different embroidery stitches appropriate to a particular design. They will gain hands of knowledge in Traditional Indian embroideries, Tribal embroidery of India and many other needle techniques like gold and silver works and zardosi works. They will be able to design appliquéés, prepare patch works and do smock work on fabric surface.

Unit I

Preparation of Samples-Embroidery –Definition- Classification– Basic hand embroidery stitches- chain stitch, running, back, satin, stem, cross, laisy daisy, herring bone, feather stitch, knotted- stitch- French knot, bullion knot- material, motifs, colour combination.

Unit II

Introduction of Traditional Indian embroidery – History, types of embroidery of different state of India – Kutch, Kathiwar, Pulkari, Kantha, kasuthi, Chambarumal, Gold & silver embroidery, Zardosi, Chikankari, Kashida. Tribal Embroidery – Introduction, Types – Nagaland, Manipuri, Lambadi, Thoda with their traditional influence, symbolism, techniques, fabric, stitches and colour combination- Preparation of samples

Unit III

Patch work-History, Structure, Types of patch work-Traditional patchwork, Crazy patchwork, Crochet patchwork, Japanese patchwork, Techniques of patchwork – Qucik squares, water colour, Strip to the strip, log cabin, magic triangle, Quilting corners, Checkboard, Russian square, honeycomb, Applique, Quilting, cut work, eyelet work, shadow work -Introduction, tools, material and techniques.

Unit IV

Crochet – Introduction, tools, material, techniques and types. Knitting – Basic, Texture, Rib, Diagonal, lace pattern, cable pattern, Cross, Knotted definition- Bend, Binding, Coil knot, Decorative knot, Hitch, lashing, loop, plait, Slip, Slipped, Seizing, Sennit, Splice, Stopper, Whipping .

Unit V

Special techniques-Braiding, Hooking, Smocking Definition- Smocking types- Cable stitich, Stem stitch, Outline stitch, Cable flowerette, Wave stitch, Honeycomb stitch, Surface

honeycomb stitch, trellis stitch, Vandyke stitch, Bullion stitch,, Bead and Sequins, Fringes, Mirror work. Fabric painting- using fabric colours, glitters and pastes.

Text Books

1. Shaylaja; D. Naik, Traditional Embroideries of India – APH corp, New Delhi 1996
2. Sheila paine: Embroidered Textile- Thames & Hudson Ltd. 1990
3. Usha Srikant: Ethnic Embroideries of India
4. Savithri Pandit: Indian Embroidery.
5. Aasha Kutch works Border Designers book, book no 142, Vol 2
6. Animal embroideries and patterns Serena
7. Basis crochet stitches Erika knight 978-1843404040
8. Crochet holiday collection 53 crochet designs Donna Scott

References

1. Embroiders pattern book
2. Embroidery and stitch tools Amrit bajaj 978-81-8411-352-5
3. Embroidery designs for children's garments Nirmals .C Mistr
4. Embroidery Vol 5, Exclusive designer sarees
5. 100 First crochet Lesley stanfield 978-1-84340-612-9
6. 101 Folk embroidery and traditional handloom weaving Shailaja D. Naik
7. Needle craft skills techniques 65 practical projects Lucinda Gandert
8. Surface designing of textile fabrics Shailaja 81-224-1860-0

Lecture Schedule

Unit	Topics to be covered	Hours
I	Preparation of Samples-Embroidery –Definition- Classification– Basic hand embroidery stitches- chain stitch, running, back, satin, stem, cross, laisy daisy, herring bone, feather stitch,	6
	knotted- stitch- French knot, bullion knot- material, motifs, colour combination.	6
II	Introduction of Traditional Indian embroidery – History, types of embroidery of different state of India – Kutch, Kathiwar,	6
	Pulkari, Kantha, kasuthi, Chambarumal, Gold & silver embroidery, Zardosi, Chikankari, Kashida..	5
	Tribal Embroidery – Introduction, Types – Nagaland, Manipuri, Lambadi, Thoda with their traditional influence, symbolism, techniques, fabric, stitches and colour combination- Preparation of samples	5
III	Patch work-History, Structure, Types of patch work- Traditional patchwork, Crazy patchwork.	4
	Crochet patchwork, Japanese patchwork, Techniques of patchwork – Qucik squares, water colour, Strip to the strip, log cabin, magic triangle	4

	Quilting corners, Checkboard, Russian square, honeycomb, Applique	4
	Quilting, cut work, eyelet work, shadow work -Introduction, tools, material and techniques.	4
IV	Crochet – Introduction, tools, material, techniques and types.	5
	Knitting – Basic, Texture, Rib, Diagonal, lace pattern, cable pattern, Cross, Knotted definition- Bend, Binding, Coil knot, Decorative knot, Hitch,	5
	lashing, loop, plait, Slip, Slipped, Seizing, Sennit, Splice, Stopper, Whipping .	5
V	Special techniques-Braiding, Hooking, Smocking Definition- Smocking types- Cable stitch, Stem stitch,	5
	Outline stitch, Cable flowerette, Wave stitch, Honeycomb stitch, Surface honeycomb stitch, trellis stitch, Vandyke stitch, Bullion stitch,,	5
	Bead and Sequins, Fringes, Mirror work. Fabric painting- using fabric colours, glitters and pastes.	5
	Total	74

TEXTILE TESTING

Course code: 18TFDU0407

Credit: 3+0

Max Mark:100

Objectives:

- To impart the knowledge of Testing of fiber, Yarn and Fabric to the students.
- Enables to know about different Textile Testing Instruments and Machines as well as their working principles.
- Helps in determining the Quality parameters and Testing conditions required in a Textile testing Lab.

Specific Learning Outcome:

Textile Testing is an important paper dealing with different physical and functional parameters required for textiles. After learning the paper the students will be aware of testing principles and procedures for fibre, yarn and fabric. They can handle textile testing equipments without any external assistance and prepare testing data more effectively and accurately.

Unit I

Textile fiber test- Fiber identification by use of microscope, Burning test, Laboratory test- Length and Uniformity, Fineness and maturity, Chemical test for textile fibers, Objectives and selection of samples- Fiber, yarn, Fabric sampling.

Unit II

Moisture relations- Regain, Moisture content, Humidity, Standard atmosphere, Dry hygrometer, Fiber testing- measurement of fiber length, Comb sorter, Fibrograph, Measurement of fiber finness air flow instruments, measurement of maturity of cotton.

Unit III

Yarn testing-Yarn count, Yarn twist, Direction, Amount of twist and effect of Twist on fabric Properties, Measurement of twist, Yarn evenness- Cause of irregularity, Effect of irregularity, Measurement of irregularity.

Unit IV

Fiber testing- Woven, Knitted, Nonwoven, Dimensions, Length, Width, Thickness, Determination of fabric weight, Coverfactor, Air permeability, Stiffness, Crease recovery, Abrasion resistance, Pilling, Strength.

Unit V

Evaluation of Colour fastness (Cotton, Silk, Wool) laundering, Rubbing fastness wet crocking and Dry crocking, Light fastness, Perspiration to acid, Perspiration to alkaline, Colour matching cabinet.

Text Books

1. J.E. Booth, " Principles of Textile Testing" CBS publishers and Distributors, 1996.

2. Textile testing Raul Jewel
3. B.P. Saville, "Physical testing of Textiles", Woodhead publishing Ltd. 1999.
4. Pradeep V. Mehta. "Managing quality in apparel industry", New Age international ltd.

References

1. J.N. Mandal, D.G. Divshikar, "A Guide to GEO Textiles Testing", New Age International Ltd.,
2. Arindam Basu, Textile Testing, SITRA Publications.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Textile fiber test- Fiber identification by use of microscope,	3
	Burning test, Laboratory test- Length and Uniformity, Fineness and maturity.	3
	Chemical test for textile fibers, Objectives and selection of samples- Fiber, yarn, Fabric sampling.	3
II	Moisture relations- Regain, Moisture content, Humidity, Standard atmosphere,	3
	Dry hygrometer, Fiber testing- measurement of fiber length, Comb sorter, Fibrograph,	3
	Measurement of fiber finness air flow instruments, measurement of maturity of cotton.	3
III	Yarn testing-Yarn count, Yarn twist, Direction, Amount of twist and effect of Twist on fabric Properties, Measurement of twist.	4
	Yarn evenness- Cause of irregularity, Effect of irregularity, Measurement of irregularity.	4
IV	Fiber testing- Woven, Knitted, Nonwoven, Dimensions, Length, Width, Thickness, Determination of fabric weight,	4
	Coverfactor, Air permeability, Stiffness, Crease recovery, Abrasion resistance, Pilling, Strength.	4
V	Evaluation of Colour fastness (Cotton, Silk, Wool) laundering, Rubbing fastness wet crocking and Dry crocking,	4
	Light fastness, Perspiration to acid, Perspiration to alkaline, Colour matching cabinet.	4
	Total	42

WOMEN'S APPAREL

(Practical)

Course code: 18TFDU0408

Credit: 0+3

Max Mark:100

Objectives:

- To impart the practical knowledge in pattern drafting and construction of women's garments.
- To the style variation in women's wear.
- To develop creative skills in construction for different age group of women's wear.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for women independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire.

Unit I

Each garment 5 varieties preparatory models

Saree petticoat – Six Panel (or) Eight Panel (any one), Middi and Middi top With Waist Band, Plain Skirt, Rrapron Skirt.

Unit II

Each garment 5 varieties preparatory models

Salvar, Kameez for Teenage girls, Night wear/Night garment , Maxie for Teenage girls, Kurthis for Teenage girls.

Unit III

Each garment 5 varieties preparatory models

Saree Blouse with Plain Sleeve, Kattori Blouse with varieties of sleeve, Choli blouse.

Unit IV

Each garment 5 varieties preparatory models

Ladies shirt half sleeve and full sleeve, House coat with shawl collar

Unit V

Each garment 5 varieties preparatory models

Ladies pant and its varieties with side zipper attached .

Text Books

1. Scientific garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011 Easy cutting –Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
2. A stitch in time-Frederick0-19-512615-7

3. Aasha Blouse Design Vol 24, book no 209
4. Aasha Blouse Design Vol 28, book no 213
5. Aasha Blouse Design Vol 34, book no 220
6. Aasha Designer's Blouse , book no 215
7. Aasha Golden Collection Blouse , Vol 3, book no 222

References

1. Cutting and tailoring course illustrated Gayathri Verma
2. Cutting and tailoring theory Vol 1 Eshwari Anwani
3. Cutting and tailoring theory Gayathri Verm,
4. Garment construction skills Premalatha mullick 81-272-0267-3, 81-272-0267-3
5. Commercial system of cutting - Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
6. Zarapker system of cutting –K.R Zarapker ,Navneet publication ltd.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Saree petticoat – Six Panel (or) Eight Panel (any one), Middi and Middi top With Waist Band.	6
	Plain Skirt, Rrapron Skirt.	6
II	Salvar, Kameez for Teenage girls, Night wear/Night garment	6
	Maxie for Teenage girls, Kurthis for Teenage girls.	6
III	Saree Blouse with Plain Sleeve,	6
	Kattori Blouse with varieties of sleeve, Choli blouse.	6
IV	Ladies shirt half sleeve and full sleeve	6
	House coat with shawl collar	6
V	Ladies pant and its varieties with side zipper attached	6
	Total	54

APPAREL CAD
(Practical)

Course code: 18TFDU0409

Credit:0+3

Max. Marks:100

Objectives:

- To acquaint students with CAD and CAM based applications in Textiles and Apparel industry.
- To impart knowledge of computer applications in design, draft, cut, production and management information systems.
- To bring the awareness of computer application to the field of fashion designing.
- To provide the knowledge about fashion software's and its application.

Specific Learning Outcome:

Computer aided designing is an important skill that is required by a fashion designer, textile designer or a graphic designer at the present Era. After completion of this course the students will have hands on skills in sketching, colouring, rendering and various other techniques involved in sketching using CAD software. They will be able to illustrate human figures in different postures and garments. They will be able to create design patterns; do texture mapping, 3d Visualization and simulation of fabrics on garments.

Unit I

Motifs development – Symmetrical / asymmetrical, Balanced / Unbalanced repeat (arrangements), Drop reverse and placement of design in borders, pallu, and all over, Developing Small Designs, Motifs for necklines, embroidery designs for hand kerchiefs

Unit II

Texture Mapping- in fashion apparel, texture mapping in home furnishings, 2D Designing, slides with color changes in garment, design changes in garment

Unit III

Software applications in production department, Garment design using jindex software, Label Designing, Logo designing for branded apparel.

Unit IV

Developing- Patterns making- Grading and manual planning, Developing Women's and Men's Garments, Casual dressings 5 varieties), Party wears -5 varieties).

Unit V

Formal wear (Any One) using jindex and Corel draw, Kid's wear- frock (5 varieties), Design the slack shirt-Middi and Middi top (any two) (5 varieties).

Text Books

1. Mikell. P. Groover, Emory W. Zimmers; Jr, “ CAD /CAM computer aided design and maufacturing”, Printice Hall of India PVL. Ltd.
2. Veinsinet D D, “ Computer aided drafting and Design Concept & Applications, 1987
3. Digital fashion illustration Kesin Tallon978-0-7134-9058-9
4. Alison Beazley & Terry bond”, Computer Aided pattern Design and Product development” Blackwell Science, 2004.

References

1. Carr H & Barbara Latham B, “Technology of clothing manufacture.” 3rd edition, Black well sciences Publication 2000
2. winfred Aldrich, “ CAD In clothing ‘ and textiles, Blackwell science, 1994
3. Taylor P, “ Computers in Fashion industry”, Heineman publishers 1990.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Motifs development – Symmetrical / asymmetrical, Balanced / Unbalanced repeat (arrangements), Drop reverse and placement of design in borders.	6
	pallu, and all over, Developing Small Designs, Motifs for necklines, embroidery designs for hand kerchiefs	6
II	Texture Mapping- in fashion apparel, texture mapping in home furnishings,	6
	2D Designing, slides with color changes in garment, design changes in garment	6
III	Software applications in production department, Garment design using jindex software, Label Designing, Logo designing for branded apparel.	6
	Label Designing, Logo designing for branded apparel.	6
IV	Developing- Patterns making- Grading and manual planning, Developing Women’s.	6
	Men’s Garments, Casual dressings 5 varieties), Party wears - 5 varieties)	6
V	Formal wear (Any One) using jindex and Corel draw, Kid’s wear- frock (5 varieties), Design the slack shirt-Middi and Middi top (any two) (5 varieties).	6
	Total	54

INDUSTRIAL TRAINING-II

Course code: 18TFDU0410

Credit:2

Max.Marks:50

Objectives

- To expose students to experience and knowledge which is required in industry, where these are not taught in the lecture rooms.
- To apply the knowledge taught in the lecture rooms in real industrial situations.
- To use the experience gained from the 'Industrial Training' in discussions held in the lecture rooms.
- To get a feel of the work environment.
- To gain experience in writing reports in works/projects.
- To expose students to the responsibilities and work ethics.
- With all the experience and knowledge acquired, it is hoped at the students will be able to choose appropriate work upon graduation.

Specific Learning Outcome:

After successful completion of a field visit in a reputed textile manufacturing concern the student will have a complete commercial knowledge on textiles, they will gain knowledge about the latest machineries and equipments.

Industrial Training

Industrial Training refers to work experience that is relevant to professional development prior to graduation. One of the requirements for the award of Bachelor of Science is that students must complete at least 2 weeks of Industrial Training. Industrial Training is normally accumulated during the semester breaks at the end of the second year. Students should note that Industrial Training is an essential component in the development of the practical and professional skills required of a candidate and an aid to prospective employment. Many employers regard this period as a chance to vet new employees for future employment.

All students should make considerable effort and give sufficient thought into obtaining the most relevant and effective Industrial Training. Whilst difficult, it is desirable to obtain experience in a range of activities, such as e.g. design office, laboratory and on-site situations. It should also be noted that developing an awareness of general workplace behavior and interpersonal skills are important objectives of the Industrial Training experience.

V Semester
HOME TEXTILES
(Practical)

Course code: 18TFDU0511

Credit: 0+3

Max Mark:100

Objectives:

- To understand the Home Textiles and Furnishing concepts and production techniques.
- To enhance the knowledge on the types and uses of Home Furnishing to the textile students.

Specific Learning Outcome:

This paper will enable the students to design Home Textiles based on different mapping, of home layout. They will be able to develop, design, and constructs different style of Home textiles. They will be able to coordinate the Home textiles to the Home Layout.

Unit I

Introduction to Table linens - Table cloth- table linen types- Square checks, Centrepiece table cloth, White lace table linen, Crochet table covers, Contrast table linen, polka dots, Straw covers, Runner, Placemats, Glass mates and napkins. Developing, preparatory of models.

Unit II

Introduction to Bed linens – Top sheet, Bottom sheet, Coverlet, Bedspread, Blanket, Comforter, Duvet, Duvet cover, Euro or continental pillow, Sleeping pillow, Decorative pillow, Bolster pillow, pillowcase, Pillow sham, Bed skirt, Throw blanket. Developing, preparatory of models.

Unit III

Introduction to Kitchen linens – Apron definition- Bib apron, Server apron, Bistro apron, Cobbler apron, Tuxedo apron, Dishwasher apron, Diy retro apron, Pinafore, Tabard, Bungalow apron, Clerical apron, Mittens , Bread Basket and Pot holder. Developing, preparatory of models.

Unit IV

Introduction to Window textiles - curtains definition- Flat panel curtain, panel pair curtain, Tab top curtain, Grommet curtain, Sah curtain, Rod pocket curtain, Thermal curtain, Curtain liners, Roman shades, Shutter, Solar shade, Wood blinds, Faux wood blinds, Panel track blinds, Roller shades, Pleated shades, draperies definition-any one variety. Developing, preparatory of models.

Unit V

Introduction to Upholstery definition, traditional upholstery, office upholstery, home furnishing upholstery– three seated and two seated sofa covers. Cushions with decorative effect, Teapot Cover- printed and embroidered. Developing, preparatory of models.

Text Books

1. Carpets : Back to Front, Textile progress, Vol.19, No.3 by – L Cegiela MA, The Textile Inst. Publication
2. Textile Floor coverings by G.H. Crawshaw, Textile Progress, Vol.9, No.2, The Textile Inst. Publisher.
3. Interior Furnishings, Textile Progress, Vol.11, No.1, By Mortimer O. Shea, The Textile Inst. Publication
4. Interior Furnishing by Mortimer O.Shea, Textile Progress, Vol.11, No.1, The Textile Institute, Publication.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Introduction to Table linens - Table cloth- table linen types- Square checks, Centrepiece table cloth, White lace table linen, Crochet table covers,	5
	Contrast table linen, polka dots, Straw covers, Runner, Placemats, Glass mates and napkins. Developing, preparatory of models.	5
II	Introduction to Bed linens – Top sheet, Bottom sheet, Coverlet, Bedspread, Blanket, Comforter, Duvet, Duvet cover,	5
	Euro or continental pillow, Sleeping pillow, Decorative pillow, Bolster pillow, pillowcase, Pillow sham, Bed skirt, Throw blanket. Developing, preparatory of models.	5
III	Introduction to Kitchen linens – Apron definition- Bib apron, Server apron, Bistro apron, Cobbler apron, Tuxedo apron, Dishwasher apron.	5
	Diy retro apron, Pinafore, Tabard, Bungalow apron, Clerical apron, Mittens , Bread Basket and Pot holder. Developing, preparatory of models.	5
IV	Introduction to Window textiles - curtains definition- Flat panel curtain, panel pair curtain, Tab top curtain, Grommet curtain, Sah curtain, Rod pocket curtain, Thermal curtain, Curtain liners,	6
	Roman shades, Shutter, Solar shade, Wood blinds, Faux wood blinds, Panel track blinds, Roller shades, Pleated shades, draperies definition- any one variety. Developing, preparatory of models.	6
V	Introduction to Upholstery definition, traditional upholstery, office upholstery, home furnishing upholstery– three seated and two seated sofa covers.	6
	Cushions with decorative effect, Teapot Cover- printed and embroidered. Developing, preparatory of models.	6
	Total	54

MEN'S APPAREL

(Practical)

Course code: 18TFDU0512

Credit: 0+3

Max Mark:100

Objectives:

- To impart the practical knowledge in pattern drafting and garment construction skills in men's wear for the students.
- To develop creative skills in designing and constructing men's wear for different age groups.

Specific Learning Outcome:

This paper will enable the students to prepare patterns based on individual measurement and stitch garments for men independently without any assistance. The students can develop complex patterns and designs based on the practical skill they acquire.

Unit I

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -T - Shirt with U neck (or) V Neck, Slack Shirt - With Shirt Collar and Patch Pocket.

Unit II

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -Full sleeve shirt with yoke and cuff, Shorts and knickers.

Unit III

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -Pyjama with Side pockets, Pleated trousers with zipper fly and bound pockets.

Unit IV

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -kalidhar kurtha with continuous bound placket (5 varieties), Nehru kurtha with pocket, Band collar and Tailored placket.

Unit V

Each garment 5 varieties preparatory models

Measurement, Designing, Pattern making and constructing -S.B. Vest coat with (or) without Bound Pocket (5 varieties), Men's S.B. Coat with shawl / collar and Ticket Pockets.

Text Books

1. Garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011
2. Easy cutting –Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
3. Commercial system of cutting - Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
4. Zarpker system of cutting –K.R Zarpker ,Navneet publication ltd.

References

1. Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college ,32 North park street ,Ambattur , channi. Pratical clothing construction – Part I and II Mary Mathews, cosmic Press Chennai.
2. Garment construction skillsPremalatha mullick 81-272-0267-3, 81-272-0267-3

Lecture Schedule

Unit	Topics to be covered	Hours
I	Measurement, Designing, Pattern making and constructing - T - Shirt with U neck	5
	V Neck, Slack Shirt - With Shirt Collar and Patch Pocket.	5
II	Measurement, Designing, Pattern making and constructing - Full sleeve shirt with yoke	5
	Cuff, Shorts and knickers.	5
III	Measurement, Designing, Pattern making and constructing - Pyjama with Side pockets.	5
	Pleated trousers with zipper fly and bound pockets.	5
IV	Measurement, Designing, Pattern making and constructing - kalidhar kurtha with continuous bound placket.	5
	Nehru kurtha with pocket, Band collar and Tailored placket	5
V	Measurement, Designing, Pattern making and constructing - S.B. Vest coat with (or) without Bound Pocket (5 varieties),	5
	Men's S.B. Coat with shawl / collar and Ticket Pockets	5
	Total	50

PORTFOLIO PRESENTATION (Practical)

Course code: 18TFDU0513

Credit:0+3

Max Mark:100

Objectives:

- To make students understand the importance and concepts of Portfolio presentation.
- To impart practical skills for portfolio presentation

Specific Learning Outcome:

Portfolio is the collection of designs by a designer organized systematically. After gaining handful knowledge in the paper the student will be able to create portfolio on any theme that is provided to them. An effective and creative portfolio is required by each and every student to get into fashion designing career. Hence portfolio will act as mind of the student and will enable every recruiter to judge the students designing skill based on the portfolio they have prepared.

Unit I

Portfolio- meaning, Definition, Illustrate the portfolio flats, Mood board-definition, Story board, Fabric board- Rendering techniques for portfolio flats, Colour board-meaning, Types using combinations.

Unit II

Fabric development, Design development and presentation in portfolio sketching and rendering the fabric effects, Croquis mixed with flats. Figure composition for layout, Figures and Accessories, Space and Shapes in the layout, Grouping figures, Layout choice, Spontaneous layout.

Unit III

Design a portfolio garment Indian- Prints and Embroidery, Ethnic, Classic wear garments for Men, Women, Children (each 5 varieties).

Unit IV

Design a portfolio garment western- prints and Embroidery, Ethnic, Classic wear garments for Men, Women, Children (each 5 varieties).

Unit V

Display ideas- Visual, planning background, lighting, space planning, Display planning with and without mannequin and board items etc

Text Books

1. Comdex Fashion Design- Vol-1 Fashion Concepts
2. J Jarnow and KG Dickenson, “ Inside the fashion Business” Prentice Hall
3. Be stylish with Bernia Quleshi Bernia Gureshi
4. Comdex Fashion Design Vol -1 Fashion Concepts Vikas Gupta
5. Cooklins garment tech note for fashion design Steven 978-81-265-3537-8

References

1. Costumes and textiles of Awadh Sushana Swarup
2. Fashion designing Ritu bal 817573776
3. Comdex Fashion Design Vol -2 Esembles for your body type Vikas Gupta
4. Gini Stephens Frings “ Fashion – from concept to consumer” Pearson Education
5. Jerligan Easterling “ Fashion Merchandising and Marketing” Person Education
6. Polly Guerin “ Creative fashion Presentation” Fairchild Publications
7. Drake / Spooone/ Greenwald “ Retail fashion promotion and Advertising”

Lecture Schedule

Unit	Topics to be covered	Hours
I	Portfolio- meaning, Definition, Illustrate the portfolio flats, Mood board-definition, Story board,	5
	Fabric board- Rendering techniques for portfolio flats, Colour board-meaning, Types using combinations.	5
II	Fabric development, Design development and presentation in portfolio sketching and rendering the fabric effects, Croquis mixed with flats.	5
	Figure composition for layout, Figures and Accessories, Space and Shapes in the layout, Grouping figures, Layout choice, Spontaneous layout.	5
III	Measurement, Designing, Pattern making and constructing - Pyjama with Side pockets.	5
	Pleated trousers with zipper fly and bound pockets.	5
IV	Design a portfolio garment Indian- Prints and Embroidery, Ethnic, Classic wear garments for Men, Women, Children (each 5 varieties).	5
V	Display ideas- Visual, planning background, lighting, space planning, Display planning with and without mannequin and board items etc	5
Total		40

INTERNSHIP-I

Course code: 18TFDU0514

Credit:2

Max.Marks:50

Specific Learning Outcome:

After successful completion of an internship in a reputed textile manufacturing or garment manufacturing concern the student will have a complete commercial knowledge on textiles and garments, they will gain knowledge about the latest machineries and equipments.

Internship

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

**VI Semester
TECHNICAL TEXTILES**

Course code: 18TFDU615

Credit: 4+0

Max. Marks:100

Objectives:

- To acquaint students with the application of Non woven & technical textiles in industry.
- To impart knowledge of technical textiles with their properties and applications.
- To understand the concepts of smart textiles, nano textiles and other technical textiles.

Specific Learning Outcome:

After learning the paper the students will understand the complexity of the textile industry. They will gain knowledge in Technical textiles its classifications, technical fibers and its applications. They will have a lot of options for their project during their final semester and also learn about different career options they have got in various different fields of textile application.

Unit I

Technical textiles definition and classification- Introduction, scope of technical textiles. Application of technical textiles- function and uses. High performance fibres- selection, property and its function.

Unit II

Medical textiles definition and classification- introduction, fibers selection for medical textile- types, requirements of fibres used in medical field. Specialized area for textile application in medical. Non- implantable materials, extra corporal devices, implantable material and health care/ hygiene products- fibre selection, fabrics used, property, products and its function. Eco-textiles- definition, application of eco textiles.

Unit III

Geo textiles definition and classification- introduction, geo synthetics- geo textile types and fibre forming polymers. Essential properties of geo textiles- mechanical, filtration and chemical resistance property. Natural fibres used in geo textiles- application of natural geo textiles performance of natural fibres geo textiles for soil strengthening and frictional resistance of geo textiles.

Unit IV

Protective textiles definition and classification- introduction, protective clothing- requirements of fibre selection, fabric construction, finishes for protection. Ballistic protective material. Water proof fabrics, flame retardant fabric and extreme weather condition fabric.

Unit V

Textiles for automatic industry- introduction, textile fibres required for automatic industry. Textiles in cars, train, air crafts, marine- functional application. Nano technology- definition, application of nano technology in the field of textiles. Smart textiles- definitions, application of smart textiles. Intelligent textiles- definition, area of application of intelligent textiles.

Text Books

1. Meachm Lewin & Jack Preston, and book of Fiber Science & Technology. Volume I, High technology fibers part A; Marcel Dekker. Inc 1993
2. Menachem Lewin & Jack Preston; Handbook of Fiber Science & Technology Volume II, High technology fibers, part B; Marcel Dekker Inc 1993
3. Menachem Lewin & Jack Preston, Hand book of Fiber Science & Technology Volume III, High technology fibers part C Marcel Dekker. Inc 1993

References

1. Sarah. E Braddock and Marie O' Mahony" Techno textiles – Revolutionary fabrics for fashion & design", Thames & Hudson 2002.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Technical textiles definition and classification- Introduction, scope of technical textiles.	4
	Application of technical textiles- function and uses. High performance fibres- selection, property and its function.	4
II	Medical textiles definition and classification- introduction, fibers selection for medical textile- types, requirements of fibres used in medical field.	4
	Specialized area for textile application in medical	3
	Non- implantable materials, extra corporal devices, implantable material and health care/ hygiene products- fibre selection, fabrics used, property, products and its function.	4
	Eco-textiles- definition, application of eco textiles.	3
III	Geo textiles definition and classification- introduction, geo synthetics- geo textile types and fibre forming polymers..	3
	Essential properties of geo textiles- mechanical, filtration and chemical resistance property	3
	Natural fibres used in geo textiles- application of natural geo textiles performance of natural fibres	3
	geo textiles for soil strengthening and frictional resistance of geo textiles.	3

IV	Protective textiles definition and classification- introduction, protective clothing- requirements of fibre selection, fabric construction, finishes for protection.	4
	Ballistic protective material. Water proof fabrics, flame retardant fabric and extreme weather condition fabric.	3
V	Textiles for automatic industry- introduction, textile fibres required for automatic industry.	3
	Textiles in cars, train, air crafts, marine- functional application.	3
	Nano technology- definition, application of nano technology in the field of textiles.	3
	Smart textiles- definitions, application of smart textiles	3
	Intelligent textiles- definition, area of application of intelligent textiles	3
	Total	56

ENTREPRENEURSHIP DEVELOPMENT

Course code: 18TFDU0616

Credit: 3+0

Max. Marks:100

Objectives

- To develop entrepreneurship skills among the students in textile field.
- To familiarize the students with the process and procedure of setting up, new enterprises.

Specific Learning Outcome:

After learning this course the students will have a basic understanding about entrepreneurship and the types and role of an entrepreneur. This paper will enable the students to know how to become an independent entrepreneur, various financial agencies available to acquire funds and asset benefits, they will have knowledge on world trade practices, and several other managerial aspects that are required by a successful entrepreneur.

Unit I

Merchandising and Merchandiser Entrepreneurship – Definition, role and expectation – entrepreneurial styles and types – characteristics of entrepreneur – functions of an entrepreneur – promotion of entrepreneurship – role of socio- culture, growth of entrepreneurial culture.

Unit II

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

Unit III

Identification of business opportunity in Textiles and Fashion Business - preparation of feasibility report – financial and evaluation – project formulation – common errors in project formulation – specimen project report.

Unit IV

SWOT Analysis. Corporate entrepreneurship (intra entrepreneurship)- concepts – need – strategies – cooperate practices- plans for survival and growth, dynamics of competition. Merchandising and retailing, visual merchandising.

Unit V

Women entrepreneurship needs – growth of women entrepreneurship – problems faced by women entrepreneurs-development of women entrepreneurship – informal sector – rural sector – and sectors in textile and apparel industry.

Text Books

1. RajaGopal, Entrepreneurship & Rural markets
2. H.B.S. press, Harward Business Review on Entrepreneurship Harward business review, USA
3. Michele Gananger, Fashion Entrepreneurship Retail Business planning.
4. Harrel W. For Entrepreneurs only. Career Publishing
5. Jain G R & Gupta D, New Initiatives in Entrepreneurship Education & Training.

References

1. Chunawalla S.A. Sales Management, Himalayan publishing House, New Delhi, 1999.
2. Dr.N.Rajan Nair, Sajith R. Nair Marketing, Sutanchand and Sons, New Delhi, 2002.
3. Vasant Desai, Project Management and entrepreneurship, Himalaya Publishing House, New Delhi, 2009.
4. David H.Moli, Entrepreneurship, prentice Hall of India, New Delhi, 1999.
5. Frank Jerkins, Advertising, prentice Hall of India, New Delhi, 2000.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Merchandising and Merchandiser Entrepreneurship – Definition, role and expectation – entrepreneurial styles and types – characteristics of entrepreneur	4
	functions of an entrepreneur – promotion of entrepreneurship – role of socio- culture, growth of entrepreneurial culture.	4
II	Entrepreneurship in apparel industry: Business planning – Starting a new venture related to apparel industry, essentials of a successful centre;	4
	Location & plant layout-factors, influencing plant location, building, structure, lighting, ventilation, material handling, availability of labour, material management and transportation.	4
III	Identification of business opportunity in Textiles and Fashion Bussiness preparation of feasibility report –..	3
	financial and evaluation – project formulation – common errors in project formulation – specimen project report.	4
IV	SWOT Analysis. Corporate entrepreneurship (intra entrepreneurship)- concepts – need – strategies – cooperate practices- plans for survival and growth, dynamics of competition.	4
	Merchandising and retailing, visual merchandising.	3
V	Women entrepreneurship needs – growth of women entrepreneurship – problems faced by women entrepreneurs-	4
	Development of women entrepreneurship – informal sector – rural sector – and sectors in textile and apparel industry	4
	Total	38

HISTORIC COSTUMES OF INDIA

Course code: 18TFDU0617

Credit 3+0

Max. Marks:100

Objectives:

- To understand the various century's costumes and historic textiles in India.
- To have concepts on colour, motif and specialization in different state costumes of India.
- To enhance the students knowledge regarding accessories and jewellery of different Eras.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in Historical textiles and Designs starting from the evolution to human to till date. The students will gain knowledge on traditional woven textiles of India and the Traditional embroideries of different states of India. They will even learn about the Traditional costumes of different states of India spread on varied diversity.

Unit I

Indian- History, India valley civilization-Vedic perio, Mauryan perio, Gupta perios, Mughal period, Rajput period, British periods

Unit II

Traditional attires of north India- Jammu and Kashmir- Climate condition costume, Colourful pherans shawls, Intricate embroidery, Goucha, Himachal Pradesh and Uttaranchal – Short ghaghras, kurti and chunder or chunri, Riwaaz, pagri.

Unit III

Clothing in western India- Rajasthan and Gujarat- climate condition costume, radiant costume, ghagra choli and odhnis, gota nad zari work. Rajasthani- Bandhini, tie-n-dye, head wear to toe ornaments, Maang-teeka, Matha-patti, Rakhdi or ghundi, banda, Dhabla, pachewara and Bugatari. Maharashtrian- Pheta or patka or Rumal, mega sleeve choli or blose, Marathi look typical nathni.

Unit IV

Costumes of east and north-east Inda- Bengali- Dhoti-kurtha, Assam- mekhla chador, Meghalaya-Jainsen, Mizoram, Manipur-Phanek,potlois, Tripura, Nagaland and Arunachal Pradesh – Buddhist monpas tribal costume.

Unit V

Clothing styles of south India- Kerala- Lungis, Mundu and Neriathu, saree zari bordaered, Karnataka-Angavastram, Andhra Pradesh- long sleeve choli, kurta, Tamil Nadu- Knachipuram silk. Origin, History- brocades of Banaras, Baluchari, Chanderi, Pochampalli.

Text Books

1. John Gillow & Nicholas Barnad, “Traditional Indian Textiles”. Thames & Hudson, 1993
2. Martand Singh, “ Saris’ of India – Bihar & West Bengal”, Wiley Eastern Ltd. 1993
3. Rta Kapur chishti & Amba Sanyal, “Saris of India – Madhya Pradesh,” Wiley Eastern Ltd. 1989
4. Ancient Indian Costume, Roshen Alkazi, Art Heritage (1983)
5. Costumes and textiles of Royal India – Ritu Kumar Published by Christie’s Books.
6. The Guide to Historic Costumes, Karen Baclawski, Drama Publishers (1995).
7. Ikat textiles of India - G.K. Ghosh
8. Impressions – a classic collection of Indian textiles design (with cd) Prakasha. K

References

1. India by design Boroian
2. Indian fashion designing Prakash
3. Indian Ikat textiles -Rosemary crill 1-85177-242-1
4. Indian textiles ethnic and beyond (with cd) R.M. Lehri
5. Jute handlooms of india 1-890206-18-0
6. Shifting sands Kutch Textiles Traditions : Transformation Archana Shah
7. Textiles and crafts of India, Arunachal Pradesh, Assam, Manipur Vandana Bhandra
8. Traditional Embroideries of India Shailaja D. Naik

9. Traditional Indian Costumes and Textiles Bhatnagar
10. Warli paintings, Traditional folk arts from India K. Prakash
11. Suvasas the beautiful costumes Vishnu arora 978-81-8247-196-2
12. Textile and dress of Gujarat Eiluned Edwards
13. Textile art of India - Kokyo Hatanaka
14. Madhu Priya, “An innovative Collection of Indian Textile designs,” Honesty Publishers & Distributors
15. “Traditional Indian costumes & textiles”, by Dr. Parul Bharnager, Abhishek Publication.
16. “The Costumes and textiles of India”, by – Jamila Brij Bhusan, Taraporevala – Bombay.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Indian- History, India valley civilization-Vedic perio, Mauryan perio	3
	Gupta perios, Mughal period, Rajput period, British periods	3
II	Traditional attires of north India- Jammu and Kashmir- Climate condition costume, Colourful pherans shawls,	3
	Intricate embroidery, Goucha, Himachal Pradesh and Uttaranchal – Short ghaghras, kurti and chunder or chunri, Riwaaz, pagri.	4

III	Clothing in western India- Rajasthan and Gujarat- climate condition costume, radiant costume, ghagra choli and odhnis, gota nad zari work..	3
	Rajasthani- Bandhini, tie-n-dye, head wear to toe ornaments, Maang-teeka, Matha-patti, Rakhdi or ghundi, banda, Dhabla, pachewara and Bugatari	4
	Maharashtrian- Pheta or patka or Rumal, mega sleeve choli or blose, Marathi look typical nathni.	4
IV	Costumes of east and north-east India- Bengali- Dhoti-kurtha, Assam- mekhla chador, Meghalaya-Jainsen, Mizoram,	4
	Manipur-Phanek,potlois, Tripura, Nagaland and Arunachal Pradesh – Buddhist monpas tribal costume.	3
V	Clothing styles of south India- Kerala- Lungis, Mundu and Neriathu, saree zari bordaered,	4
	Karnataka-Angavastram, Andhra Pradesh- long sleeve choli, kurta, Tamil Nadu- Knachipuram silk.	3
	Origin, History- brocades of Banaras, Baluchari, Chanderi, Pochampalli.	3
Total		40

PROJECT

Course code: 18TFDU0618

Credit 0+4

Max.Marks=100

Final year under graduate students at the end of final semester under goes a minor research work. Based on the curriculum/ area of interest by the individual has been focused with objectives, and detailed work on literature, methodology, result analysis and submitting as bound work with summary ,conclusion with evidence of tools used, appendix. This will be evaluated as per the scheme.

INTERNSHIP-II

Course code: 18TFDU0619

Credit:2

Max.Marks:50

Specific Learning Outcome:

After successful completion of an internship in a reputed textile manufacturing or garment manufacturing concern the student will have a complete commercial knowledge on textiles and garments, they will gain knowledge about the latest machineries and equipments.

Internship

Period of supervised training required for qualifying for a profession. It follows a specified number of academic credits or classroom years. To provide a valuable opportunity to gain work experience in a student's chosen field before graduation. A student or a recent graduate undergoing supervised practical training. Since relevant work experience is one of the key qualifications companies look for when comparing candidates for a job or internship, completing several internships during college greatly increases the chances of being selected for a job after graduation. Even though college students learn the knowledge required for succeeding in a specific career through their college courses and curriculum, internships are one of the best ways to develop the required skills necessary to gain the experience required to be successful in the field.

Completing an internship can help a student decide if a particular career is actually the right fit for them, and through an internship, students can establish contacts or even earn college credit while working in a part-time, temporary position. Additionally, in a competitive job market, internships for college students give recent graduates an edge over other potential candidates who do not have any relevant work experience.

TEXTILES AND FASHION MERCHANDISING

Major Elective

Course code: 18TFDU04E1

Credit: 3+0

Max. Marks:100

Objectives:

- To develop and deliver effective presentations, conduct and participate in meetings and use the specific tactics to improve negotiation skills.
- To impart knowledge of merchandising in fashion industry in understanding Production activities and Productivity involved in a garment unit.
- To impart merchandising skills and merchandising knowledge in the field of apparel and textile.
- It helps in merchandising, terminologies, concept and application of merchandising, types of merchandisers.

Specific Learning Outcome:

Merchandizing is the backbone of all industrial activity, a merchandiser is a very important official who deals with the entire production process and is a communicator to the buyer and the manufacturer. Hence after learning this paper the student will understand the role and responsibilities that are required by a merchandiser. They will have a thorough knowledge on various quality aspects that a merchandiser has to follow, gain knowledge in fabric and trims sourcing and will be able to prepare an effective costing plan for a garment.

Unit I

Merchandising and merchandiser, Introduction to Merchandising, Understanding fashion Merchandising, Requirements of a Merchandiser, Responsibilities of a merchandiser Fashion merchandising terminology, Role of Merchandiser.

Unit II

Types of Merchandising - Export House – manufacturer Exporter-Merchant exporter – Buying house- Buying Agency –Types of Buying agency Selection of Buyer's and Buying Agency. Pre-buying Activity, Fabric types, properties and Behavior, selection of Fabric, Garment-Construction, Quality requirements; quality problems,

Unit III

Fashion promotion; Media planning and production communication through different media- media ethics, press notes. Fashion advertising and public relations, image management- Brand building, Fashion centers and Trade shows. Marketing analysis definition , types- Advertising and Media Planning, Fashion shows and other events, Industry tour and Project. Surveys and organizing of exhibitions.

Unit IV

Merchandiser's role after production, Delivery date extension, transport delays - Natural calamities, Importance of LC amendments. Importance of costing in textile industry- elements of costing, fabric construction/ GSM calculation, patterning VS. costing, fabric

consumption calculation, fabric costing- woven and knits, value added materials in garments, Garment costing-men's style, ladies style, children's style, shipping charges, trial costing.

Unit V

Sampling- Importance, presentation, Counter samples, Importance of time in sampling, Retailing merchandiser, concepts, Quick response, Forecasting analysis, Concepts of apparel line planning, Style planning, production and quality planning, Directing and coordinating and controlling. Cost production and prototype and production.

Text Books:

1. Apparel merchandising management Vasugi raja 978-81-907757-3-1
2. Encyclopedia of Textiles set of 4 vols S. Naik
3. Encyclopedia of textiles vol (4) 1 Naik978-93-313-1847-3
4. Statistics for textile apparel managementJ. Hayavadan
5. Apparel Marketing and merchandizing M.S. Sheshadri
6. Grace I. Kunz, Merchandising: Theory, principles and practices, Fairchild publication.
7. Elaine Stone, Dynamics of Fashion, Fair Child Publication
8. Phillip Kotler, Marketing management, Pearson Prentice Hall,

References

1. Tim Jackson & David Shaw, Fashion Buying & Merchandising Management.
2. M.S. Sheshadri, Apparel marketing & Merchandising, MS Publication, Bangalore.
3. Fashion Merchandising –Strong Elian
4. Managing Quality In Apparel Industry – Pradeep Metha
5. Human Behaviour At Work – Keith Davis.
6. Marketing Management – Philip Kotler
7. Marketing Management – Sharlekar
8. Fashion Marketing – Mike Easey(Ed), Blackwell Science
9. Marketing Management – Rajan Nair
10. Fashion from concept to consumer Gini Stephi 0-13-177478-6

Lecture Schedule

Unit	Topics to be covered	Hours
I	Merchandising and merchandiser, Introduction to Merchandising, Understanding fashion Merchandising, Requirements of a Merchandiser	4
	Responsibilities of a merchandiser Fashion merchandising terminology, Role of Merchandiser.	4
II	Types of Merchandising - Export House – manufacturer Exporter-Merchant exporter – Buying house- Buying Agency –Types of Buying agency Selection of Buyer's and Buying Agency.	4
	Pre-buying Activity, Fabric types, properties and Behavior, selection of Fabric, Garment-Construction, Quality requirements; quality problems,	4
	Fashion promotion; Media planning and production communication through different media- media ethics, press	3

III	notes Marketing analysis definition	
	Fashion advertising and public relations, image management- Brand building, Fashion centers and Trade shows.	3
	types- Advertising and Media Planning, Fashion shows and other events, Industry tour and Project. Surveys and organizing of exhibitions.	3
IV	Merchandiser's role after production, Delivery date extension, transport delays - Natural calamities, Importance of LC amendments. Importance of costing in textile industry-elements of costing, fabric construction/ GSM calculation, patterning VS.	4
	costing, fabric consumption calculation, fabric costing-woven and knits, value added materials in garments, Garment costing-men's style, ladies style, children's style, shipping charges, trial costing.	4
V	Sampling- Importance, presentation, Counter samples, Importance of time in sampling, Retailing merchandiser, concepts, Quick response,	3
	Forecasting analysis, Concepts of apparel line planning, Style planning, production and quality planning,	3
	Directing and coordinating and controlling. Cost production and prototype and production.	3
	Total	42

RECENT ADVANCES IN APPAREL DESIGN

Course code: 18TFDU05E1

Credit: 3+0

Max. Marks:100

Objectives:

- To introduce students to aspects of fashion and recent advances in apparel designs
- To impart knowledge about various product standards and product specifications and the process of product development towards market need.

Specific Learning Outcome:

Apparel design is the backbone of all industrial activity, with the entire production, fitting and importances of apparel and gain knowledge in fabric and trims sourcing and will be able to prepare an effective costing plan for a garment

Unit I

Foundation garment- introduction, materials used and types of fitting for Men's and Women's inner wear and swim wear. Fitting- principles of fitting, standards for a good fit, E-fitting, body scanner, 3D simulators. Interlining interfacing- materials, types, properties, application and machinery.

Unit II

Introduction to manual/ computerized pattern development, mini- marker. Software's used for pattern development. Introduction to digitizer plotter scanner. Grading- computerized grading and software's used for grading. Spreading- definition, methods of spreading, spreading machine. Nature of the fabric packages.

Unit III

Lay out- definition, importance and principles of layout, importance of fabric estimation, advantages, methods of estimation material requirement for garment- easy method and formula method of estimation. Handling special fabric - stretch fabric, knit, checks, braids, velvet, leather, fur and lace.

Unit IV

Marking- definition, requirements of marker planning, methods of marker planning and computerized marker planning. Cutting- objective methods of cutting, cutting tools and equipments- hand shears, straight knife cutting machine, band knife, round knife, notches, drills and thread markers, computerized cutting machine, laser cutting, plasma cutting, and ultrasonic cutting.

Unit V

Garment finishing industrial Equipment for fusing, stain removal, pressing, Detecting foreign particle and packing. Colour matching- importance, computerized colour matching cabinet. Efficiency of planning fabric wastage.

Text Books

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drive, Don Mills, Ontario (1995) . .
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
4. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996

References

1. Shenai V.A, Technology of Textile processing, Chemistry of dyes and principles of dyeing, A Sevak Publication, Bombay, 1993.
2. Nalankili. G., Textile Finishing, SSM Publications, Komarapalayam.
3. Prayag. R.S., Technology of Textile Printing, L.R. Prayag.
4. Manivasagam. N. Treatment of textile processing effluents, Sakthi Publications, Coimbatore 1995.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Foundation garment- introduction, materials used and types of fitting for Men's and Women's inner wear and swim wear.	4
	Fitting- principles of fitting, standards for a good fit, E-fitting, body scanner, 3D simulators. Interlining interfacing-materials, types, properties, application and machinery.	4
II	Introduction to manual/ computerized pattern development, mini- marker. Software's used for pattern development. Introduction to digitizer plotter scanner.	4
	Grading- computerized grading and software's used for grading. Spreading- definition, methods of spreading, spreading machine. Nature of the fabric packages.	4
III	Lay out- definition, importance and principles of layout, importance of fabric estimation, advantages, methods of estimation material requirement for garment- easy method and formula method of estimation.	4
	Handling special fabric - stretch fabric, knit, checks, braids, velvet, leather, fur and lace.	4
IV	Marking- definition, requirements of marker planning, methods of marker planning and computerized marker planning. Cutting- objective methods of cutting, cutting tools and equipments- hand shears, straight knife cutting machine, band knife,	4
	Round knife, notches, drills and thread markers, computerized cutting machine, laser cutting, plasma cutting, and ultrasonic cutting.	4
V	Garment finishing industrial Equipment for fusing, stain removal, pressing, Detecting foreign particle and packing..	4
	Colour matching- importance, computerized colour matching cabinet. Efficiency of planning fabric wastage,	4
	Total	40

FASHION PSYCHOLOGY

Course code; 18TFDU05E2

Credit: 3+0

Max. Marks: 100

Objectives:

- To learn and understand the scenario in the fashion psychology.

Specific Learning Outcome:

By learning this subject the students will acquire handful knowledge in the latest developments and trends in fashion. Development is subjected to all the clothing, selection of cloth, factors affecting in fashion.

Unit I

Clothing Definition, Classification, Introduction to Clothing understanding clothing, Purpose of clothing:- Protection, Modesty, Attraction etc. Clothing Values, Clothing Culture, men and women clothing and ornamentation, groups, Role and status of clothing. Clothing according to climatic conditions,- Arctic region- African, Asia and Arabs etc.

Unit II

Selection of clothes:Clothes for children, middle age, adults, Types of clothes according to human figure, Different materials for different clothes. Colors suitable for different garments. Kids to teenage clothing.

Unit III

Modern Clothing-Youth style and fashion, Teddy boy, skins modes, hippies, punks, taste of youth and their life style. Ancient to modern clothing, minis maxis, unisex, fit women, glamorous woman. Casual and formal clothing. Fashion for all, ready to wear fashion, mass marketing of fashion.

Unit IV

Planning for clothing for children- school, parties, sports, casual, Wardrobe Planning, Factors for clothing selection- Social Factors- Place, cultural, gender, occupation, occasion and social status. Economic Factors- Social economic condition, economic status, Availability of technology, Availability of technology.

Unit V

Environmental factors- Climate condition, protection from extreme condition and unusual places. Physiological factors- Age, Health condition, Physical structure of body or personality, Thermo physiological and Activity level.

Text Books

1. Black A.J. (1985) , ‘ A History of Fashion’ ,USA Orbits Publishing Ltd.
2. Rouse E. (1989), ‘Understanding Fashion’,UK, Blackwell Science.

Lecture Schedule

Unit	Topics to be covered	Hours
I	Clothing Definition, Classification, Introduction to Clothing understanding clothing, Purpose of clothing:- Protection, Modesty, Attraction etc.	4
	Clothing Values, Clothing Culture, men and women clothing and ornamentation, groups, Role and status of clothing.	4
	Clothing according to climatic conditions,- Arctic region-African, Asia and Arabs etc.	4
II	Selection of clothes:Clothes for children, middle age, adults, Types of clothes according to human figure, Different materials for different clothes.	4
	Colors suitable for different garments. Kids to teenage clothing.	4
III	Modern Clothing-Youth style and fashion, Teddy boy, skins modes, hippies, punks, taste of youth and their life style.	4
	Ancient to modern clothing, minis maxis, unisex, fit women,glamorous woman. Casual and formal clothing. Fashion for all, ready to wear fashion, mass marketing of fashion.	4
IV	Planning for clothing for children- school, parties, sports, casual, Wardrobe Planning, Factors for clothing selection- Social Factors- Place, cultural, gender,	4
	occupation, occasion and social status. Economic Factors- Social economic condition, economic status, Availability of technology, Availability of technology.	4
V	Environmental factors- Climate condition, protection from extreme condition and unusual places..	4
	Physiological factors- Age, Health condition, Physical structure of body or personality, Thermo physiological and Activity level	4
	Total	43

TEXTILE CRAFTS

Skill Based Electives

Course code: 18TFDU05S1

Credit 0+2

Max Mark=50

Objectives:

- To provide opportunity for skill development in textile craft.
- To impart knowledge on handi craft textile products and its varieties.

Specific Learning Outcome:

This paper will enable the students to learn the craft and its types like floral designing, lace making, rug making for decorative purpose.

Unit I

- Quilting and quilt art -5 varieties
- Ceramics and glass craft – 5 varieties
- Floral Design 5- varieties. Bouquet (Each sample five varieties preparation models)

Unit II

- Lace making
- Leather carving
- Leather crafting Bouquet (Each sample five varieties preparation models)

Unit III

- Rope making,
- Beadwork
- Paper craft– paper marbling, Quiling work
- Canvas work (Each sample five varieties preparation models)

Unit IV

- Tatting work
- Applique work
- Patch work
- Macrame (Knotting) paracord (Each sample five varieties preparation models)

Unit V

- Rug making
- Embroidery and its varieties
- Handi crafts wall hangers/pot decoration (Each sample five varieties preparation models)

SOFT TOY MAKING

Skill Based Electives

Course code: 18TFDU05S2

Credit: 0+2

Max Mark:50

Objectives:

- To provide opportunity for skill development in soft toy making.

Specific Learning Outcome:

This paper will enable the students to make toys and its types, to give the knowledge about the soft toy making.

Unit I

Making of Toys – Classification of Toys – materials used – socks , cotton materials , Terry cloth, Felt materials and fur materials

Unit II

Designing – Measurement used – Pattern Making and developing Toys, Fish, Frog, Small Toys for case

Unit III

Designing – Tracing of patterns – Construction of soft Toys – dogs, duck, snakes

Unit IV

Preparation and hand made Toys – Monkey, parrot, squirrel

Unit V

Making of Soft Toys- Teddy bear, Dolphins and Elephant

CARE AND MAINTENANCE OF TEXTILES

Modular Course

Course code: 18TFDU06M1

Credit: 2+0

Max. Marks:50

Objectives:

- The subject focuses on the improvement on the aesthetic values of the textile material.
- To impart knowledge in laundry, laundering agents and their proper use.

Specific Learning Outcome:

After learning this paper the students will gain thorough knowledge in Care and maintenance of textile materials. They will be able to classify different finishing processes of textiles, preparatory process and different bleaching process. They will know different dyeing process, dyeing equipments, printing process, laundering process, soap and detergent manufacturing process, Fusing technology and fusing process.

Unit I

Laundry Equipment- Principles of laundering, methods of washing – Application of friction - hand friction, Rubbing and scrubbing - Application of light pressure, kneading and squeezing suction – washing – use of washing machine. Purchase and maintenance of equipment.

Unit II

Water – hard and soft water – Methods of softening water. Soaps and detergents – manufacture of soap, Quality of good soap, cleansing action of soap and uses of soap.

Unit III

Detergents-manufacturing process of detergents, soap less detergents, indigenous cleaning agents like Rita nuts. Shikkakai – green gram- bran solutions and their application.

Unit IV

Optical brighteners and starching – stiffening agents – Natural and commercial starches – Preparation of starch; use blueing agents – their application – optical blues, bleaches, types of bleaches and other laundry reagents.

Unit V

Dry cleaning and laundering - Methods of finishing damping – Ironing Methods of ironing different garments - Drying equipments. Dry cleaning and storage. Stain removal-definition, different types of stain removal, methods of stain removal and their applications.

Text Books

1. Textiles fabric & Their Selection, Wingate, I.B. Allied Publications Pvt. Ltd., Chennai.
2. Fundamentals of Textiels and Their care. Dantyagi.S. Orient Longman Ltd., New Delhi 1980.

References

1. Family clothing taste of Glession John wiley & Sons Inc., Illionois latest Edition.
2. Household textiles and laundry work durga Deulkar, Alma Ram & Sons, Delhi.

QUALITY CONTROL MANAGEMENT

Modular Course

Course code: 18TFDU06M3

Credit:2+0

Max Mark:50

Objectives:

- To familiarize students with different apparel quality standards, their underlying principles and the international accepted standards and test methods.
- To familiarize students with the different testing equipments, their underlying principles and the international accepted standards, test methods and the language of measurement
- To develop understanding of the importance of quality control in textile testing

Specific Learning Outcome:

Students will gain knowledge about the quality standards, Labeling Eco specification in apparels and textiles. quality control program, implementation of quality systems in production line, product specifications and analysis using analytical tools.

Unit I

Quality-definition, Importance of quality, Basic concepts, Quality control, Total quality control, Quality assurance in textile industry, Needs for quality, Evaluation of quality.

Unit II

Quality control- Inspection, quality and productivity, Historical importance- Inspection, Quality circle in textile industry. Costing- Yarn costing, Fabric costing, Garment costing and madeups. Prevention, Appraisal and Failure aspects of quality, Planning of investment, Return of investment.

Unit III

Training for quality, Planning training programme, Types of training, Common training practice in the textile industry, Methods and approaches, Small group approaches. Quality circle- Back ground to quality circle, Essential preconditions for successful quality circles

Unit IV

Organizing and training for quality control in textile industry. Quality assurance and quality design, National and International standardization, Quality assurance systems, Basic requirements of quality of design in textile industry.

Unit V

Textile management- Introduction, Approach to Production Operation Management (POM), Operation strategies, human resource management- Meaning, Nature, Objects, Scope and functions, Importance of human factor, Human Resource Management (HRM) with reference to textile industry.

Text books:

1. Managing quality in apparel industry, Pradeep V Mehta, NIFT Publications
2. An Introduction to quality control for the apparel industry, Mehta P V, Marcel Dekker
3. Physical testing and quality control, Vo123, No. 1/2/3 textile Institute (1993)
4. Textile Testing, John Skinkle, Brooklyn Publication, New York .

References

1. Textile Testing, P. Angappan&Gopala Krishnan, JK. Publications
2. John H Shinkle, Textile testing, Brooklyn publication 2003

BASIC TEXTILE ECONOMICS
Modular Course

Course code: 18TFDU06M4

Credit: 2+0

Max. Marks:50

Objectives:

- To create awareness on Export and Import policies among the students.
- To impart knowledge on shipment policies and procedures
- To understand world trade policies and mutual trade agreements among exporting nations
- To impart knowledge on how to become a successful exporter.

Specific Learning Outcome:

After learning this course the students will have an understanding about the economics and knowledge about shipment policies and procedures. This paper will enable the students to know how to become an independent successful exporter.

Unit I

Introduction Concepts of Textile Economics, Textile Economics of demand and supply, elasticity of demand, working of textile market mechanism, Theory of Production in textiles short run & long run. Textile environment of business: Introduction to concept of textile business environment and other factor.

Unit II

Concepts of different types of textile costs and Cost Functions, determination of price and output in perfect and imperfect market conditions, price discrimination. Demand forecasting with reference to different textiles and fashion industries.

Unit III

Textile industries component of environment: economic, political, legal, social, technological & international Economic systems, economic planning in India, objectives, strategies and evaluation of year plan for domestic and international marketing.

Unit IV

Textile industrial policy and industrial licensing. New textile economic policies, textile Company regulatory legislations in India, MRTP, FEMA, EXIM in light of liberalization policies. Public sector in India: concepts, philosophy and objectives, performance, problems and constraints, Industrial Sickness, Privatization.

Unit V

Textile Management: Textile industries planning, Organizing, Staffing, Leading, Communicating, Controlling. Marketing Management, Trade practices, promotion, Theory of textile business cycles, Concept causes and Measures to control business cycles. Theories of inflation: causes and control of inflation, monetary and fiscal policy. Balance of Payments: concept, causes of disequilibrium and remedial methods

Text Books

1. International trade and export management (2008) Francis Cherunilam, Himalaya publishing house – New Delhi.
2. Foreign Trade (2005) Jeevanandam. C, Sultan Chand & Sons – New Delhi.
3. Principles of management- Dinakarpagare, sultan chand and sons, delhi.

References

1. Entrepreneurship Development in India – Dr. C.B Gupta , Dr N.P . Srinivasan, sultan Chand and sons delhi 1997.

GARMENT COSTING

Course code: 18TFDU04E2

Credit: 3+0

Max. Marks:50

Objectives:

1. To gain knowledge about costing skills.
2. To gain information about cost control.
3. To acquire knowledge about techniques for costing.
4. To know about different estimation of cost.

Specific Learning Outcome:

After learning this course the students will have an understanding about the garment cost and sampling cost and accessories used in the garments .

UNIT – I

Principles of Costing - Requirements of Good Costing System - Cost Unit - Types of Costs: Fixed Cost, Variable Cost, Semi Variable Cost, Conversion Cost, Replacement Cost, Differential Cost, Imputed Cost, Sunk Cost, Research Cost , Development Cost , Policy Cost , Shutdown Cost– Cost sheet and its components – Cost sheet format.

UNIT – II

Elements of Cost: Direct Material Cost, Direct Expenses, Direct Wages, Indirect Materials, Indirect Expenses, Indirect Expenses, Labour cost, Production Overhead, Administrative Overhead, Selling and Distribution Overhead , Total cost.

UNIT – III

Cost Estimation of Fiber, Yarn, Fabric, Knitting, Dyeing, Printing & Finishing - Cost Estimation for cutting, Stitching, pressing, Packing, Shipping, Forwarding and etc., -- Cost control measures in apparel industry.

UNIT – IV

Cost control - function of cost control, cost of product development- product cost, analysis of design cost, development cost, profit of design, apparel manufacturing cost control, sales cost control, purchasing cost control, production cost control, administration cost control, cost ratio policy, manufacturing budget, cash flow control, standard cost sheet, break even chart, cash break even chart, analysis (or) detailed break even chart.

UNIT – V

Costing of Apparels – Estimation of cost for various garment styles in children’s wear, - Estimation of cost for various garments styles in Women’s wear, Estimation of cost for various garments styles in Men’s wear.

Text Books

1. Apparel Costing – M. Krishnakumar, Abhishek Publication, Chandigarh.
2. Principles of Textile Testing – J.E. Booth
3. Hand book of textile Testing & Quality Control – Elliot b. Grover & D.S. Hamby
4. Textile testing – P. Angappan & R. Gopalakrishnan

References

1. Managing Quality in Apparel Industries – Pradeep V Metha & Satish k. Bhardwaj
2. ISI standards [BIS] / AATCC / ASTM – Technical manuals Concept of entrepreneurship:

Wardrobe Planning

Course code: 18TFDU06M2

Credit: 2+0

Max. Marks:50

Objectives:

1. To gain knowledge about garment wardrobe.
2. To gain information about clothing and accessories.
3. To acquire knowledge about women and men clothing.
4. To know gain knowledge about special wardrobe planning.

Specific Learning Outcome:

After learning this course the students will have an understanding about the deigning of wardrobes, panning the wardrobe according to the age, sex and size..

Unit-I

Wardrobe planning-definition functions of clothing factors to considers in wardrobe planning. Needs for planning wardrobe benefits of planning a wardrobe

Unit-II

Clothing-Classification of clothing –clothes, Accessories & cosmetics. Wardrobe planning for new born babies, toddler, pre schooler, schooler, Adolescence-(boys & girls).

Unit-III

Wardrobe planning for women-college going girls, office going women, pregnant women, lactating women aged women.

Unit-IV

Wardrobe planning for men's-college going boys office going men's adult mens, old age man special wardrobe planning for physically challenged men & women.

Unit-v

Accessories & Cosmetics-Definition, wardrobe planning for Accessories –headdress, jeweler, footwear, carried objects, bells, hosiery, watch and eye glasses wardrobe planning for cosmetics –pomade, powder, perfume, body paint, make up kit, skin care and hair care.

Text Books

1. Elements of design & apparel design,sumathy g.new age international pvt.ltd,2002
2. Art and fashion is clothing selection,M.C.Gimsely and harriot.T.,Nova state uty,press,new York
3. Suzanne G.Marshall,hazel o.jockson M.Sue Stanley,mary ketgan(2000) Individually in clothing selection and personal Appearance”Phullis touchie specnt.New jersey,2nd edition.

References

1. Tentiles fabrics and their selection-wingate IB,Allied publishers ltd,Chennai.
2. Family clothing –Tate of glession, john wileys son Inc. illionis.