

PERIYAR UNIVERSITY

**Periyar Palkalainagar
Salem – 636 011**



**Department of
Textiles and Apparel Design**

Professional Studies
B.Voc. Programme
(Choice Based Credit System)

REGULATIONS AND SYLLABUS

**The Tamil Nadu State Council for Higher Education
(TANSICHE) Scheme**

**Effective from
Academic year 2023 – 2024 and thereafter**

B.Voc TEXTILES AND APPAREL DESIGN
Regulations and Syllabus
Effective from the academic year 2023 - 24 and thereafter (TANSICHE)

The department was established during the year 2015-2016. The Undergraduate course offered by the Department is B.Voc in Textiles and Apparel Design which gives an in-depth knowledge of fashion designing, Basics of textiles, Sewing Machine Operator, Production Supervisor, Draping, Quality Control, Garment Construction, Textile Analysis, Textile Processing, Sourcing Manager, Apparel merchandising, Industrial Engineering and Computer Application in Designing.

Duration of the Programme

The three-year undergraduate program in B.Voc Textiles and Apparel Design consists of six semesters under Choice Based Credit System with NOS/QP packs approved by the Sector Skill Council.

Eligibility for Admission

A Pass 10+3 Year Diploma, A Pass in Higher Secondary Examination (Academic or Vocational Stream) conducted by the Government of any state. No age Limit.

Teaching Methodologies

The teaching method will be Student Centered approach like On-the-Job Training, Internship, field trip and demonstration.

Examinations

Semester pattern is followed. The examination for the Semester I, III and V will be held in November/December and for Semester II, IV and VI will be in the month of April/May. NSDC Assessment will be held on the Sewing Machine Operator, Production Supervisor, Industrial Engineering and Sourcing Manager Levels followed by NOS.

Scheme for valuation

Evaluation will be done on a continuous basis and will be evaluated four times for a course. The first evaluation will be in the 7th week, the second in the 11th week, third in the 16th week and the end – semester examination in the 19th week. Evaluation will be done by multiple choice questions, analytical and descriptive types.

Credit Calculation

Method of teaching	Hours	Credit
Lecture	1	1
Tutorial/Demonstration	1	1
Practical/Internship/On the job training/ self-Learning	2	1

Scheme for Internal Marks in Theory (Maximum marks - 25)

Attendance	- 05 marks
Assignment	- 05 marks
Internal Tests Best one of two tests	- 10 marks
Model Exam	- 05 marks

Scheme for Internal Marks in Practical (Max.marks-40)

Record	- 20 marks
Model Exam	- 20 marks

Question Paper Pattern (Theory)		
Duration of the Examination - 03 hours		Maximum Marks: 75 Marks
Part A MCQ	Answer All Questions Each Units: 04 Questions (Lower order thinking skills K1 – 02 Questions; K2 – 02 Questions)	20 x 1 = 20 marks
Part B Analytical	Answer any 3 out of 5 questions Each Units: 01 Question (Higher order thinking skills K4 - All Questions)	03 x 5 =15 marks
Part C Descriptive	Answer All Questions (Either or Choice) Each Units: 02 Questions (Lower order thinking skills K2 – any two units; Middle order thinking skills K3 – any two units; Higher order thinking skills K5 – any one unit choice 'a'; K6 – choice 'b'.	05 x 8 = 40 marks

PROGRAMME OUTCOMES

1. The graduates will be employable at various levels (Certificate, Diploma and Degree) of the programme.
2. The graduates have creative and innovative skills in the field of Textiles, Design and Apparel Industry.
3. The graduates can start up their business, freelance and consultancy
4. The graduates are capable of dealing with the recent developments and research in Textiles and Apparel Industry

GRADUATE ATTRIBUTES:

1. Analysis of fibre to end use:

Analyze the structure and processes of the fibre, yarn, and fabric.

2. Professional sewing skills:

Apply essential knowledge and abilities in sewing, sewing machine operations, various industrial apparel machine maintenance, and Standard operating procedures in Apparel manufacturing units.

3. Design Development:

Execute the core fashion designing skill sets for the work function of a fashion designer, such as colour concepts, design elements and principles, customized, industrial pattern making and portfolios.

4. Research and inquisition

Develop research abilities for market research, trend analysis and forecasting, novel product development and design consulting.

5. Vocational and Industrial Exposure:

Effortlessly obtain placements with skills acquired in Textiles, Apparel and Design which prepare the students to be technical experts in their chosen field.

6. Sustainable Development:

Competent to work on up-to-date requirements in the Textile and Apparel Industries with expertise in quality norms and systems connected to Sustainable Apparel Production.

7. Innovation and Entrepreneurship:

In an organization the graduates perform as a capable leader, able administrator and innovative design thinker. With their entrepreneurship knowledge, graduates can become Entrepreneurs and also become creative freelancers with design innovation in clothes and computer applications.

8. Management Techniques

Administer the managerial responsibility by following the Standard Operating Procedures. The graduates will help to reduce waste, enhance factory efficiency, productivity and solve problems by applying their knowledge and skills of the lean manufacturing process and Six Sigma.

9. Personality Development:

Achieve consistent performance in professional context with the use of Communication skills, etiquettes and adaptable awareness

10. Value Education

By practicing yoga and physical fitness and raising environmental consciousness, the graduates can achieve their professional and personal goals.

11. Digital literacy:

Demonstrate their proficiency by using software like Photoshop, Corel Draw, TUKA-CAD, and MS-Excel.

PROGRAMME SPECIFIC OUTCOMES:

- PS01. Make use of acquired knowledge to analyze fibre to its end use.
- PS02. Apply their key knowledge in their professional Sewing skills.
- PS03. Execute the fundamental design development skills.
- PS04. Apply research skills for design and market needs.
- PS05. Acquire employment with their vocational and industrial exposure.
- PS06. Apply sustainable quality standards in Textile and Apparel production.
- PS07. Become an entrepreneur, act as an efficient leader and apply design thinking innovation and carryout freelancing opportunities.
- PS08. Apply management tools and techniques to improve processes and products.
- PS09. Achieve consistent performance in working environment with effective communication and etiquettes
- PSO10. Achieve personal and professional goals by practicing a healthy lifestyle and with environmental consciousness.
- PSO11. Apply modern tools and software.

MAPPING OF PROGRAMME SPECIFIC OUTCOMES (PSOs) WITH GRADUATE ATTRIBUTES (GAs)

PROGRAMME SPECIFIC OUTCOMES (PSOs)	GRADUATE ATTRIBUTES (GAs)										
	1	2	3	4	5	6	7	8	9	10	11
PSO1	✓										
PSO2		✓									
PSO3			✓								
PSO4				✓							
PSO5					✓						
PSO6						✓					
PSO7							✓				
PSO8								✓			
PSO9									✓		
PSO10										✓	
PSO11											✓

MAPPING OF PROGRAMME OUTCOMES (POs) WITH PROGRAMME SPECIFIC OUTCOMES (PSOs)


PROGRAMME OUTCOMES (POs)	PROGRAMME SPECIFIC OUTCOMES (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
PO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PO2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PO3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PO4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓


MAPPING OF PROGRAMME OUTCOMES (PSOs) WITH COURSES

Type	Units	Courses	PROGRAMME SPECIFIC OUTCOMES (PSOs)										
			PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11
LEC	5	Professional Tamil I				Red	Yellow	Yellow	Blue	Red	Yellow	Yellow	
LAB	5	Professional English I				Red	Blue	Yellow	Red	Red	Blue	Blue	
LEC	5	Basics of Textiles	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Red	Red
LAB	4	Fibre to Fabric Practical	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Red	Red
LEC	5	Fashion Designing	Yellow	Blue	Red	Red	Blue	White	Red	Blue	Blue	Blue	Blue
LAB	4	Portfolio - Basic Seams and Apparel Manufacturing Techniques	Yellow	Red	Blue	Blue	Red	Red	Red	Blue	Yellow	Yellow	White
LAB	3	Basic Hand Embroidery		Red	Red	Red	Blue	Blue	Blue	Blue	Red	Red	Blue
LEC	5	Professional Tamil II				Red	Yellow	Yellow	Blue	Red	Yellow	Yellow	
LAB	5	Professional English II				Red	Blue	Yellow	Red	Red	Blue	Blue	
LEC	5	Industrial Garment Machineries and Equipments		Red	Yellow	Blue	Red	Blue	Blue	Blue	Yellow	Red	
LAB	3	Basic Draping Practical	Blue	Red	Red	Red	Red	Red	Red	Blue	Yellow	Yellow	Yellow
LEC	5	Drafting and Computerized Pattern Making Practical		Red	Red	Red	Red	Red	Red	Red	Blue	Yellow	Red
QP	4	Specialized Sewing Machine Operator	Yellow	Red	Blue	Red	Red	Red	Red	Red	Red	Red	Blue
LAB	4	Portfolio - Training on Quality in Apparel Production	Yellow	Red	Red	Red	Red	Red	Red	Red	Red	Blue	Red
LEC	5	Professional Tamil III			Yellow	Red	Yellow	Blue	Red	Yellow	Blue	Yellow	White
LAB	4	Professional English III				Red	Blue	Yellow	Red	Red	Blue	Blue	Blue
LEC	5	Textiles and Apparel Quality Control		Yellow		Red	Red	Red	Red	Red	Blue	Yellow	White
LAB	4	Fashion Illustration			Red	Red	Blue	Yellow	Red	White	White	Yellow	Red
LEC	5	Chemical Processing of Textiles			Blue	Red	Red	Red	Red	Red	White	Red	Red
LAB	4	Portfolio - Industrial Engineer Reports and Documentation in Apparel industry		Blue	Red	Red	Red	Red	Blue	Blue	Red	Blue	Red
LEC	5	Entrepreneurship Development			Yellow	Red	Red	Blue	Red	Red	Red	Red	Yellow
LEC	5	Professional Tamil IV			Yellow	Red	Yellow	Blue	White	Yellow	Blue	Yellow	White
LAB	5	Professional English IV				Red	Blue	Yellow	Red	Red	Red	Blue	Blue
LEC	5	Industrial Garment Costing			Blue	Red	Red	Blue	Red	Red	Blue	Blue	Blue
LAB	3	Digital Design Studies Practical		Yellow	Red	Blue	Red	Yellow	Red	Yellow	Yellow	Yellow	Red
LAB	3	Garment Construction (Kid's Wear) Practical		Red	Red	Red	Red	Red	Red	Red	Red	Blue	Blue
QP	6	Industrial Engineer	Yellow	Red	Blue	Red	Red	Blue	Blue	Red	Red	Blue	Yellow
LEC	5	Environmental Studies			Blue	Red	Blue	Red	Red	Red	Yellow	Red	White
LEC	5	Sustainable Apparel Production	Red		Red	Red	Red	Red	Red	Red	Red	Red	White
LEC	5	Apparel Merchandising	Red	Yellow	Yellow	Red	Red	Yellow	Red	Red	Yellow	Yellow	Blue
LEC	5	Care & Maintenance of Textiles - I	Red			Red	Red	Blue	Yellow	Blue	Yellow	Yellow	White
LEC	5	Home Textiles - I	Blue	Yellow	Red	Red	Red	Red	Red	Blue	Yellow	Yellow	White
LAB	5	Boutique Designer - I (Men's Clothing)	Blue	Red	Red	Red	Red	Red	Red	Red	Blue	Red	Red
LAB	5	Boutique Designer - I (Women's Clothing)	Blue	Red	Red	Red	Red	Red	Red	Red	Blue	Red	Red
LAB	3	Surface Embellishments and Traditional Embroidery	Yellow	Red	Red	Red	Red	Red	Red	Blue	Red	Blue	Yellow

LAB	3	Yoga and Fitness Practical				High			Medium	Medium	High	High	
LAB	5	Fabric Structure Analysis Practical	High		High	High	High	Medium	Medium	Medium	Medium		Medium
LAB	4	Digital and Graphic Design Studies in Apparel Industry			High	High	High	Low	Medium	Low	Low	Low	High
LAB	4	Portfolio - Sourcing Techniques and Skills	Low	Low	Low	High	High	Medium	Medium	Medium	High	Low	Low
LEC	5	Design Thinking for Innovation				High	Medium	Medium	High	Medium	Medium	Low	
LEC	5	Apparel Marketing				High	High	Medium	High	High	Low	Low	
LEC	5	Care & Maintenance of Textiles - II				High	High	Medium	Low	Medium	Low	Low	
LEC	5	Home Textiles - II	Medium	Low	High	High	High	High	High	Medium	Low	Low	
LAB	5	Boutique Designer - II (Men's Clothing)	Medium	Medium	High	High	High	High	High	High	High	Medium	High
LAB	5	Boutique Designer - II (Women's Clothing)	Medium	Medium	High	High	High	High	High	High	High	Medium	High
LAB	4	Ornaments and Accessories	Medium	High	High	High	High	High	High	High	Medium	Low	Low
LEC	5	Professional Competency Skill	High		Low	High	High	Medium	High	High	High	High	Medium
LEC	5	Lean Six Sigma Concepts				High	High	Medium	Medium	High	Low		High
LAB	3	Fashion Portfolio Presentation	Medium	High	High	High	High	High	High	Medium	Medium		Medium
QP	6	Sourcing Manager	High	Medium	Medium	High	High	High	High	High	High	High	Low

LEC - Lecture, **LAB** -Laboratory, **EL**- Experiential Learning, **QP** – Qualification Pack


High
71-100%


Medium
31-70%


Low
1-30%


Nil
0%

B.VOC PROGRAMME CURRICULUM FRAMEWORK

CERTIFICATE: TEXTILE BASICS & INDUSTRIAL SEWING TECHNIQUES				DURATION: 01 Year						
Part	Subject Code	Semester I	Credit	Hours			Marks			
				L	T	P	CIA	EA	Total	
General Education Component										
I	23UPTAD2T01	Language Professional Tamil I	3 (G)	1	2	-	25	75	100	
II	23UPTAD2P01	English Professional English I	3 (G)	1	2	-	40	60	100	
III	23UPTAD2C01	Core Course – Theory Basics of Textiles	4 (G)	2	2	-	25	75	100	
	23UPTAD2E01	Discipline Specific Elective Course Fibre to Fabric Practical	2 (G)	-	-	4	40	60	100	
				12(G)	14					
	Skill Component									
		23UPTAD2C02	Core Course – (Theory + Practical) Fashion Designing	5 (S)	2	3	-	25	75	100
		23UPTAD2L01	Core Course – Practical Portfolio - Basic Seams and Apparel Manufacturing Techniques	4 (S)	3	-	2	40	60	100
	23UPTAD2M01	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100	
IV	23UPTAD2I01	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (10 – 15 days)	4 (S)	# 21 Hours/Week			40	60	100	
	23UPTAD2S01	Skill Enhancement (Foundation Course) Basic Hand Embroidery	3 (S)	-	3	-	40	60	100	
				18 (S)	16					
Total			30	30			900			

Note

After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester

CERTIFICATE: TEXTILE BASICS & INDUSTRIAL SEWING TECHNIQUES							DURATION: 01 Year				
Part	Subject Code	Semester II	Credit	Hours			Marks				
				L	T	P	CIA	EA	Total		
General Education Component											
I	23UPTAD2T02	Language Professional Tamil II	3 (G)	1	2	-	25	75	100		
II	23UPTAD2P02	English Professional English II	3 (G)	1	2	-	40	60	100		
III	23UPTAD2E02	Generic Elective Course Industrial Garment Machineries and Equipments	4 (G)	2	2	-	25	75	100		
	23UPTAD2S02	Skill Enhancement Course Basic Draping Practical	2 (G)	-	2	-	40	60	100		
				12(G)	12						
	Skill Component										
		23UPTAD2L02	Core Course – Practical Drafting and Computerized Pattern Making Practical	4 (S)	2	-	4	40	60	100	
		23UPTAD2Q01	Qualification Pack – I (Level 4) Specialized Sewing Machine Operator (AMH_Q2301_v2.0)	6 (S)	2	3	2	*100			
	23UPTAD2M02	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100		
IV	23UPTAD2I02	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (25 – 30 days)	4 (S)	# 21 Hours/Week			40	60	100		
	23UPTAD2S03	Skill Enhancement Course Portfolio - Training on Quality in Apparel Production	2(S)	-	2	-	40	60	100		
				18(S)	18						
			Total	30	30			900			

Note
* Assessment by Apparel Made ups & Home Furnishing Sector Skill Council, Assessment will be conducted in the beginning of the upcoming semester.
After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester

DIPLOMA: INDUSTRIAL ENGINEERING							DURATION: 02 Year				
Part	Subject Code	Semester III	Credit	Hours			Marks				
				L	T	P	CIA	EA	Total		
General Education Component											
I	23UPTAD2T03	Language Professional Tamil III	3 (G)	1	2	-	25	75	100		
II	23UPTAD2P03	English Professional English III	3 (G)	1	2	-	40	60	100		
III	23UPTAD2C04	Core Course – Theory Textiles and Apparel Quality Control	4 (G)	2	2	-	25	75	100		
	23UPTAD2E03	Discipline Specific Elective Course Fashion Illustration Practical	2 (G)	-		4	40	60	100		
				12(G)	14						
	Skill Component										
		23UPTAD2C05	Core Course – (Theory + Practical) Chemical Processing of Textiles	5 (S)	2	3	-	25	75	100	
		23UPTAD2L03	Core Course – Practical Portfolio - Industrial Engineer Reports and Documentation in Apparel industry	5 (S)	2	2	2	40	60	100	
	23UPTAD2M03	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100		
IV	23UPTAD2S04	Skill Enhancement Course (Entrepreneurial Skill) Entrepreneurship Development	2 (S)	1	1	-	25	75	100		
	23UPTAD2I03	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (10 – 15 days)	4 (S)	# 21 Hours/Week			40	60	100		
				18(S)	16						
			Total	30	30			900			

Note

After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester

DIPLOMA: INDUSTRIAL ENGINEERING							DURATION: 02 Year				
Part	Subject Code	Semester IV	Credit	Hours			Marks				
				L	T	P	CIA	EA	Total		
General Education Component											
I	23UPTAD2T04	Language Professional Tamil IV	3 (G)	1	2	-	25	75	100		
II	23UPTAD2P04	English Professional English IV	3 (G)	1	2	-	40	60	100		
III	23UPTAD2E04	Discipline Specific Elective Course Industrial Garment Costing	4 (G)	2	2	-	25	75	100		
	23UPTAD2S05	Skill Enhancement Course Digital Design Studies Practical	2 (G)	-	2	-	40	60	100		
				12 (G)	12						
	Skill Component										
	23UPTAD2L04	Core Course – Practical Garment Construction (Kid's Wear) Practical	4 (S)	2	-	3	40	60	100		
23UPTAD2Q02	Qualification Pack – II (Level 5) Industrial Engineer (AMH_Q2001_v2.0)	6 (S)	2	2	4	*100					
23UPTAD2M04	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100			
IV	23UPTAD2I04	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (25 – 30 days)	4 (S)	# 21 Hours/Week			40	60	100		
V	23UPTAD2V01	Value Education Environmental Studies (Theory + Practical)	2(S)	-	2	-	25	75	100		
				18 (S)	18						
Total			30	30			900				

Note
* Assessment by Apparel Made ups & Home Furnishing Sector Skill Council, Assessment will be conducted in the beginning of the upcoming semester.
After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester

DEGREE: TEXTILES AND APPAREL DESIGN							DURATION: 03 Year				
Part	Subject Code	Semester V	Credit	Hours			Marks				
				L	T	P	CIA	EA	Total		
General Education Component											
III	23UPTAD2C06	Core Course - Theory Sustainable Apparel Production	5 (G)	2	3	-	25	75	100		
	Discipline Specific Elective Course (Theory) – Select anyone										
	23UPTAD2E05	Apparel Merchandising	3 (G)	1	2	-	25	75	100		
	23UPTAD2E06	Care & Maintenance of Textiles - I									
	23UPTAD2E07	Home Textiles - I									
	Discipline Specific Elective Course Elective (Practical) – Select anyone										
	23UPTAD2 E08	Boutique Designer - I (Men's Clothing)	2 (G)	1	-	2	40	60	100		
	23UPTAD2 E09	Boutique Designer - I (Women's Clothing)									
	23UPTAD2 E10	Surface Embellishments and Traditional Embroidery									
	V	23UPTAD2V02	Value Education Yoga and Fitness Practical	2 (G)	-	2	-	40	60	100	
			12 (G)	13							
Skill Component											
III	23UPTAD2L05	Core Course – Practical Fabric Structure Analysis Practical	3 (S)	2	-	2	40	60	100		
	23UPTAD2L06	Core Course CC – Practical Digital and Graphic Design Studies in Apparel Industry	4 (S)	2	1	2	40	60	100		
	23UPTAD2L07	Core Course – Practical Portfolio - Sourcing Techniques and Skills	5 (S)	2	3	-	40	60	100		
	23UPTAD2M05	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100		
	IV	23UPTAD2I05	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (10 – 15 days)	4 (S)	# 21 Hours/Week			40	60	100	
			18 (S)	17							
Total			30	30			900				

Note

After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester

DEGREE: TEXTILES AND APPAREL DESIGN							DURATION: 03 Year				
Part	Subject Code	Semester VI	Credit	Hours			Marks				
				L	T	P	CIA	EA	Total		
General Education Component											
III	23UPTAD2C07	Core Course – Theory Design Thinking for Innovation	5 (G)	2	3	-	25	75	100		
	Discipline Specific Elective Course Elective (Theory) – Select anyone										
	23UPTAD2E11	Apparel Marketing	3 (G)	1	2	-	25	75	100		
	23UPTAD2E12	Care & Maintenance of Textiles - II									
	23UPTAD2E13	Home Textiles - II									
	Discipline Specific Elective Course Elective (Practical) – Select anyone										
	23UPTAD2E14	Boutique Designer - II (Men's Clothing)	2 (G)	1	-	2	40	60	100		
	23UPTAD2E15	Boutique Designer - II (Women's Clothing)									
23UPTAD2E16	Ornaments and Accessories										
IV	23UPTAD2S06	Skill Enhancement Course Professional Competency Skill	2 (G)	2	-	-	25	75	100		
			12(G)	13							
Skill Component											
III	23UPTAD2C08	Core Course – Theory Lean Six Sigma Concepts	3 (S)	2	1	-	25	75	100		
	23UPTAD2L08	Core Course – Practical Fashion Portfolio Presentation	3 (S)	1	2	-	40	60	100		
	23UPTAD2Q03	Qualification Pack – III (Level 6) Sourcing Manager (AMH_Q0920_v2.0)	5 (S)	2	1	3	*100				
	23UPTAD2M06	Minor Project and Viva-voce	2 (S)	1	-	2	40	60	100		
IV	23UPTAD2I06	Skill Enhancement Course Internship/Field Training/Work Based Learning Assessment (25 – 30 days)	4 (S)	# 21 Hours/Week			40	60	100		
V	23UPTAD2X01	Extension Activity	1 (S)	-	-	2	20	30	50		
			18 (S)	17							
Total			30	30			950				
Note :- L- Lecture, T- Tutorial, P- Practical, C- Credit, CIA – Internal Assessment, EA – External Assessment											
* Assessment by Apparel Made ups & Home Furnishing Sector Skill Council, Assessment will be conducted in the beginning of the upcoming semester.											
# After completing the Internship, Internship Assessment will be conducted in the beginning of the upcoming semester											

முதல் பருவம்
மொழிப்பாடம்
தமிழ் தொழிற்கல்வி I

பாடக் குறியீட்டெண்: 23UPTAD2T01

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

இப்பாடநெறி மாணவர்களுக்கு தமிழ் மொழியைப் பிழையின்றி பேச, எழுத, உச்சரிக்க கற்றுக்கொள்வதோடு, படைப்பாக்கத் திறனை உருவாக்கவும் வரலாற்றை மெய்ப்பிக்கும் ஆவணங்களின் அறிவைப் பெருக்கவும் உதவுகிறது.

Course Learning Outcomes (CLOs)

இப்பாட நெறி முடிவுறும் போது மாணவர்கள்

S. No	Outcomes	Domains of Learning
CLO1	தமிழ் எழுத்தின் தொன்மை குறித்து ஆய்தல்	Cognitive
CLO2	பேச்சுக்கலையின் தனித்தன்மையை மாணவர்களுக்கு உணரச்செய்தல் மற்றும் சமூகத்தில் சிறந்த பேச்சாளராக உருவாக்குதல்	
CLO3	தமிழ் மொழியில் வாசிக்கவும், சரளமாக தமிழில் உரையாடவும் சொற்றொடர்களைக் கற்பித்துத் திறன் உள்ளவர்களாக்குதல்	
CLO4	வணிகக்கடிதங்கள், பொதுஅமைப்பு மற்றும் படிவங்கள், பதிவேடுகளை உருவாக்குதல், பராமரித்தல் ஆகியவற்றைக் கற்றுக்கொள்ளுதல்	
CLO5	வரலாற்றை மெய்ப்பிக்கும் ஆவணங்களின் அறிவைப் பெறுதல்	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	L	L	L	M	H	L	L
CO2				H	L	L	L	M	H	L	L
CO3				H	L	L	L	M	H	L	M
CO4				H	L	L	L	M	H	L	M
CO5				H	L	L	L	M	H	L	M

Unit	Unit Title	Learning Chapters
I	எழுத்துத்திறன்	எழுத்து - எழுத்தின் தோற்றம்- ஓவிய எழுத்து முறை (PICTOGRAPHY) - படியெடுத்து சமர்ப்பித்தல்-அசை எழுத்து முறை (SYLLABIC WRITING) - ஓவியன் எழுத்து முறை (PHONETIC WRITING) படியெடுத்து சமர்ப்பித்தல்- தமிழ் எழுத்து வடிவங்கள்- வட்டெழுத்து- தொல்காப்பியத்தில் விளக்கப்படும் எழுத்து வடிவம்- எழுத்து பயிற்சி முறைகள் - வரியொற்றி எழுதுதல், பார்த்து எழுதுதல், அச்சிட்ட பயிற்சிப் புத்தகங்களில் எழுதுதல், சொல்வதை எழுதுதல்- எல்லா ஒலி நிறுத்தக் குறியீடுகளையும் சொல்லக் கேட்டு எழுதுதல்- சரியான வடிவமைப்புடன் இடைவெளியிட்டு எழுதுதல்

II	உச்சரிப்புத்திறன்	தமிழ் ஒலியியல்- ஒலியுறுப்புகள்- உயிரொலிகள்- மெய்யொலிகள்- ஒலிப்பு வேறுபாடுகள்- உயிர் ஒலிகளுக்கான வரைபடம்- தமிழில் கூட்டொலிகள்- கிளைமொழி - கிளைமொழிகளின் பாகுபாடு- நா நெகிழ் பயிற்சி, நா பிறழ் பயிற்சி, சொல்லிணைப் பயிற்சி, ஒலி பிறப்பியல் அடியொற்றிப் பயிற்சி.
III	வாசிப்புத்திறன்	பேச்சு திறனை வளர்த்தல் - கலந்தாய்தல், உரையாடல், சொற்போர், கருத்தரங்கு, குழு அளவு, சிந்தனை மேடை, பட்டிமன்றம், வழக்காடு மன்றம், வினாடி மன்றம், மன்ற மாதிரி அமைப்பு மன்றங்கள் - மொழி சோதனையின் கோட்பாடுகள் மற்றும் முறைகள் - மொழி சோதனையின் கருத்துகள் - வாசித்தல், வாசிப்புப் பயிற்சி- இலக்கியங்களின் பாடல்களை வாசிக்க செய்தல், அவற்றிற்கான பொருளை கற்பித்தல்- கேள்விக்கு பதிலளித்தல், தலைப்புகள் கொடுத்து பேச்சுசெய்தல் - தலைப்புகள் கொடுத்து பேச்சுசெய்தல் - செய்தித்தாள் வாசித்தல், மக்களுடன் உரையாடல் பயிற்சியளித்தல்
IV	படைப்புத்திறன்	உடை சார்ந்த வணிகவியல் கலைச்சொற்கள் பயன்பாடு - உடை சார்ந்த வணிகக் கட்டுரை எழுதுதல், வணிக நிறுவனம் குறித்த ஆய்வறிக்கை - உடை சார்ந்த வணிகம்சார் நிகழ்வு ∴ செய்திகளைத் திறனாய்வு செய்தல்,- படிவங்கள் உருவாக்குதல்- தகவல் தொடர்புப் பதிவேடுகளை உருவாக்குதல், பராமரித்தல்- பண்டைத் தமிழர்களின் வணிக மேலாண்மை அறிவியல் கலைச்சொற்கள் - அன்றாட வாழ்வில் அறிவியல் பழமொழிகளைத் தொகுத்தல் தமிழர் அறிவியல் கண்காட்சி நடத்துதல்
V	செயல்திறன் (களஆய்வு)	நடுகல் - நடுகல் எடுக்கும் முறை, நடுகற்கள் காணப்படும் இடங்கள், நடுகற்களின் உருவ அமைதி, நடுகற்களும் மக்கள் நம்பிக்கையும்)- கல்வெட்டு - (திருவாதவூர், சித்தன்னவாசல், அழகர் மலை, ஆனைமலை, திருப்பரங்குன்றம், அரசச்சலூர் ஆகிய இடங்களின் கல்வெட்டுகளும் விளக்கங்களும்) - சிற்பம் - (சிற்பங்களின் வகைகள், தமிழ்நாட்டுச் சிற்பங்கள், பல்லவர்கால சிற்பங்கள், பாண்டியர், சோழர் சிற்பங்கள்)- ஓவியம் - ஓவிய கலைச்சொற்கள், தமிழ்நாட்டு ஓவியங்கள் (திருவீழிமிழலை, காஞ்சிபுரம், திருவண்ணாமலை, திருவரங்கம், சிதம்பரம், தஞ்சாவூர், கும்பகோணம், மதுரை, புதுகோட்டை)- பாண்டியர், பல்லவர், சோழர், விஜயநகர கால நாயக்கர் ஓவியங்கள் - கட்டிடக்கலை - தோற்றம், மரபு, கோயில்கள், அரண்மனைகள் அதன் வாயிலாக கிடைக்கும் செய்தி மற்றும் விவரங்களை ஆவணப்படுத்துதல்)

பார்வை நூல்கள்

1. டாக்டர் ம. திருமலை, ஜூன் - 2015, பேச்சுக்கலை, மீனாட்சிபுத்தகநிலையம், மதுரை
2. ரா. சீனிவாசன், - 1960, மொழியியல், முதற்பதிப்பு, சைவ சித்தாந்த நூற்பதிப்பு, சென்னை.
3. பேராசிரியர் க. அன்பழகன், 2011, நீங்களும பேச்சாளர் ஆகலாம், பூம்புகார் பதிப்பகம், சென்னை
4. டேல் கார்னகி, 2012, மேடைப் பேச்சுக்கலை, கண்ணதாசன் பதிப்பகம், சென்னை
5. திரு. தி.மு.தெய்வசிகாமணி ஆச்சாரியார், 2011, மேடைத்தமிழ், தி.எ.ஐ.ஈசன் & Co. சென்னை.
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8. நடன.காசிநாதன், க.தாமோதரன், ச.ஹரிகரன், தமிழ்நாடு அரசு தொல்பொருள் ஆய்வுத்துறை, வெளியீடு, 1980.

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SEMESTER – I
ENGLISH
PROFESSIONAL ENGLISH - I

Course Code: 23UPTAD2P01

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Grasp the actual meaning or context by listening.	Psychomotor
CO2	Read and comprehend the given text with proficiency	
CO3	Communicate effectively and fluently by overcoming the hurdles.	
CO4	Write given topics effortlessly	
CO5	Use vocabulary efficiently.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	M	L	M	H	H	M	M
CO2				H	M	L	H	H	H	M	M
CO3				H	M	L	H	H	H	M	M
CO4				H	M	L	H	H	H	M	M
CO5				H	M	L	H	H	H	M	M

Unit	Unit Title	Learning Chapters
I	Communication	a) Listening to the audio text and Listening to Instructions b) Pair work and small group work c) Comprehension passages- Differentiate between facts and opinion d) Developing a story e) Grammar: Nouns and its types
II	Description	a) Listening to process description. b) Role play c) Skimming/Scanning- Reading passages d) Process Description- Compare and contrast Paragraph- Sentence Definition and Extended definition e) Grammar: Verbs (linking verbs)
III	Negotiation Strategies	a) Listening to interviews b) Mind mapping c) Longer reading text d) Essay writing e) Grammar: Verbs (helping verbs and action verbs)
IV	Presentation Skills	a) Listening to Lectures b) Short talks c) Reading Comprehension passages d) Interpreting Visual Inputs e) Grammar: Adjectives

V	Critical Thinking Skills	a) Listening Comprehension b) Making presentations c) Note making and motivational article on Professional Competence, Professional Ethics and Life Skills d) Creative writing/ Summary writing e) Grammar: Adverbs
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TEXTBOOKS

1. Raman, Meenakshi and Sharma Sangeeta, *Technical Communication: Principles and Practice*. OUP. India. 2012
2. Lata,P.& S. Kumar, *CommunicatioN Skills*, OUP, New Delhi,India.2011.

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3. John Selly, *Oxford Guide to Speaking and Writing*, 2000
4. Neal,JamesM.and Suzanne S.Brown. *Newswriting and Reporting*.Surjeet Publications.Delhi.1997.
5. McCarthy, Michael, Felicity O' Dell, *English Idioms in Use*.CUP2004rpt
6. AgarwalaN.K,(2014). *English Grammar and Composition*. New Delhi: Goyal Brothers Prakhasan.
7. Kokila S.Thangasamy,(2014). *Communicative English for College Students*. Gandhigram(T.N):Arichum Blooms.

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SEMESTER – I
CORE COURSE THEORY
BASICS OF TEXTILES

Course Code: 23UPTAD2C01

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:2:0

Course Duration : 60 Hours

Credit: 04

Course Description:

This course is designed to provide a detailed overview of textile fibres, their processing and characteristics, spinning into yarns, forming various types of fabrics by weaving and other methods of fabric creation, fabric treatment with multiple types of process

Course Outcomes (COs)

By the End of the Course, Students will be able to,

S. No	Outcomes	Domains of Learning
CO1	Interpret the different kinds of textile fibers production, properties, testing and their applications.	Cognitive
CO2	Classify the process of yarn production, yarn numbering system, yarn quality parameters and the applications of fancy yarns.	
CO3	Distinguish the types of looms with its working principles and examine the woven fabric defects.	
CO4	Relate the knitting terms, their production methods, classification along with the fabric defect and remedies	
CO5	Infer about the various types of non-woven fabric production and its application in various fields.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H	H	H	H	H	H	H	M	L	H	H
CO2	H	H	H	H	H	H	H	M	L	H	H
CO3	H	H	H	H	H	H	H	H	L	H	H
CO4	H	H	H	H	H	H	H	H	L	H	H
CO5	H	M	H	H	H	H	H	M	L	H	M

Unit	Unit Title	Learning Chapters
I	Textile Fibers	Definition, properties of textile fiber, classification of textile fiber, filament and staple fibers; cultivation, production and properties of cotton, flax, silk, wool, viscose, polyester and nylon fibers; identification of fibers – physical and chemical tests - application of various textile fibers.
II	Spinning	Introduction, raw material, ginning, Bale opening, Blow room process, carding, combing, drawing, roving, ring spinning, cone winding. Yarn numbering systems, yarn quality parameters, types of yarns and their uses.
III	Weaving	Weaving: Preparatory process - winding, warping sizing principles & Material passage. Role of important functional parts. Looms: classification, primary, secondary & auxiliary motions; passage of material in a plain power loom. Introduction to projectile, rapier and air jet weaving machines. Woven fabric defects causes & remedies.
IV	Knitting	Comparison of weaving and knitting. Terms and Definitions used in knitting. Types of knitting needles, gauge, sinker and cam settings for various knit fabrics. Basic weft and warp knitted structures.

		Comparison between warp knits and weft knits. Structure and properties of Plain, Rib, Purl, Interlock. Definition – overlap, under lap, closed lap and open lap in warp knitting. Knit Fabrics defects causes and remedies.
V	Nonwoven	Non-Woven – Definition, fibres used in non-woven process. Classification of non-woven. Web formation – Types; Bonding – Types; Spunbond, MeltBlown – Applications and End-uses in various fields.

READING LISTS AND RESOURCES

Compulsory

1. Textiles Basics by Sara J. Kadolph , 2012 & 2013
2. Textiles by Sara J. Kadolph, Sara B. Marcketti , 2017
3. Nonwoven Fabrics Raw Materials, Manufacture, Applications, Characteristics, Testing Processes by Hilmar Fuchs, Walter Kittelmann, 2006
4. Weaving and Knitting Technology books.google.co.in books Naik. S., Shailaja D. Naik, 2013
5. Nonwoven Fabrics Raw Materials, Manufacture, Applications, Characteristics, Testing Processes by Hilmar Fuchs, Walter Kittelmann, 2006
6. Nonwovens Process, Structure, Properties and Application, 2017

Highly Recommended, not Compulsory

7. Handbook of Textile Fibres Natural Fibres by J Gordon Cook, 1984
8. Industrial Applications of Natural Fibres Structure, Properties and Technical Applications, 2010
9. Natural Fiber Textile Composite Engineering by Magdi El Messiry, 2017
10. Handbook of Natural Fibres Volume 1: Types, Properties and Factors Affecting Breeding and Cultivation, 2020

Good for Students who have Future Interests

11. The Complete Technology Book on Textile Spinning, Weaving, Finishing and Printing
By Niir Board, 2009
12. Secrets of Spinning, Weaving, and Knitting in the Peruvian Highlands by Nilda Callanaupa Alvarez, 2017
13. Handbook of Natural Fibres Volume 1: Types, Properties and Factors Affecting Breeding and Cultivation, 2011

SEMESTER – I
DISCIPLINE SPECIFIC ELECTIVE COURSE
FIBRE TO FABRIC PRACTICAL

Course Code: 23UPTAD2E01

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:0:4

Course Duration : 60 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Identify the different textile fibres using diverse methods.	Psychomotor
CO2	Estimate the count and twist of the yarn samples.	
CO3	Calculate Ends Per Inch & Picks per inch and determine the woven fabric samples' weight, strength, and stiffness.	
CO4	Recognize Course per inch & Wales per inch and calculate fabric weight of the knitted fabrics.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H	M	H	H	H	H	H	M	L	L	H
CO2	H	H	H	M	M	M	H	M	M	M	M
CO3	H	H	H	M	M	M	H	M	M	M	M
CO4	H	M	H	H	M	M	H	M	M	M	M

Unit	Unit Title	Learning Chapters
I	Fiber identification	Identify the textile fibers using Microscopic, Burning, & Chemical method: Cotton, Silk, Jute, Rayon
II	Yarn Count & Twist identification	Determine the yarn count and Twist: Wrap reel, Weighing balance method - Beesley's Balance, Twist tester.
III	Woven fabric identification	Analyse the Woven fabric swatches and furnish the following details: Ends Per Inch (EPI) & Picks per inch (PPI), GSM, Stiffness.
IV	Knitted fabric identification	Analyse the knit fabric swatches and furnish the following details: Course per inch (CPI) & Wales per inch (WPI), Loop Length, Grams per square meter (GSM), Defect Identification

Laboratory Equipments: Projection Microscope, Chemicals, Burning Test Kit, Pick Glass, Wrap Reel, Weighing Balance, Quadarant Balance, Beesley Balance, Stiffness Tester, GSM Cutter, Scissors, Measuring Tools and Needle/Pins/Thread separator.

READING LISTS AND RESOURCES

Compulsory

1. Identification of Textile Fibers by M M Houck, Elsevier Science Woodhead publishing in textiles, 2009
2. Structure and Mechanics of Woven Fabrics by Jinlian Hu, 2004
2. Knitted Fabrics by John Chamberlain, James Henry Quilter, 1924
3. Corbmann B P , International students edition, Textiles – fibre to fabric, Mc Graw Hill book Co, Singapore, 1985
4. Watson's, Grosichkli Z Newness, Butter worths, Advanced Textile Design London, 1989
5. Fabric Structure and Designby N. Gokarneshan, 2009
6. Woven Textile Structure Theory and Applications by B K Behera, P K Hari, 2010
7. Structural Textile Design Interlacing and Interlooping by Syed Talha Ali Hamdani, Khubab Shaker, 2017
8. Watson's Textile Design and Colourl, Vol.1, Grosicki Z. J., Woodhead Publications, Cambridge England, 2004.
9. Principles of Fabric Formation by Prabir Kumar Banerjee, 2014
10. Fundamentals and Advances in Knitting Technology by Sadhan C. Ray, 2012

Highly Recommended, not Compulsory

11. Woven Fabric Structure Design and Product Planning by J. Hayavadana, 2016
12. Woven Textiles Principles, Technologies and Applications, 2012
13. Woven Textile Design by Jan Shenton, 2014
14. Fundamentals and Advances in Knitting Technology by Sadhan C. Ray, 2012
15. Textiles Technology byJulie Messenger, Helen Wilson, 2003
16. Warp Knitted Fabrics Construction byYordan Kyosev, 2019
17. Knitting: Colour, structure and design AlisonEllen Crowood, 21-Dec-2013

Good for Students who have Future Interests

18. Woven Textiles Principles, Technologies and Applications, 2012
19. Handbook of Weaving by Sabit Adanur, 2019
20. Fabric structure and design by Gokarneshan, D.N. New Age International (P) Ltd, New Delhi (2009)
21. Knitting Fundamentals, Machines, Structures And Developments by N. Anbumani, 2007

SEMESTER – I
CORE COURSE THEORY & PRACTICAL
FASHION DESIGNING

Course Code: 23UPTAD2C02

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 0:2:3

Course Duration : 75 Hours

Credit: 05

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Infer the concept of fashion and the terms related to fashion and apparel industry	Cognitive
CO2	Summarize about elements of design and practice the application of structural and decorative designs.	
CO3	Utilize the principles of design and its application in a dress.	
CO4	Make use of the colour concepts in designing a garment.	
CO5	Predict the factors and figure irregularities that influencing design application in a garment.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		M	H	H	H	H	M	H	M	M	M
CO2		M	H	H	M	H	H	M	M	M	M
CO3		M	H	H	H	H	H	M	M	M	M
CO4	L	M	H	H	M	H	H	M	M	M	M
CO5	M	L	H	H	M	H	H	M	M	M	M

Unit	Unit Title	Learning Chapters
I	Fashion Industry terms	Design, Style, Fashion, Trend, Fad, Classic, Collection, Fashion cycle – recurring and interrupted, Forecasting, High-fashion, Toile, Mannequin, size, fit, Portfolio, Theme, Season, Fashion show, Knock off, Counterfeit, Chic, Custom-made/Be-spoke, Pret-a-porter, Avantgarde, Haute-couture, Fashion director, Fashion editor, Costume designer, Fashion Designer- role in styling and production of costumes.
		Core Skills: <ul style="list-style-type: none"> ➤ List out the garments under the category of classic, Fad, Trend at Present and high fashion. ➤ Create Fashion Cycle for any garment. ➤ Identify the National and International Fashion Designers for Apparel and Accessories.
II	Elements of design	Design – definition & types – structural and decorative design. Requirements of a good structural & decorative design. Elements of design: Line – horizontal, vertical, diagonal, curves, wavy, circular, semi-circular & zig-zag. Shape – 2D, 3D form, Colour, size – tall and short, and Texture – hand feel: rough and smooth, eye feel: light & dark. Applications of structural & decorative designs using elements of design.

		<p>Core Skills:</p> <ul style="list-style-type: none"> ➤ Create a fabric swatch using Decorative design ➤ Apply elements of design in various garments ➤ Create a design or logo using elements of design.
III	Principles of design	<p>Principles of design: Balance - symmetric/formal and asymmetric/informal, Rhythm – rhythm through repetition, rhythm through radiation and rhythm through gradation, Emphasis - convergence, isolation/separation, exception, subordination/ contrast, Harmony and Proportion - altered, hierarchical, out of proportion and standard proportion. Application of principles of design in a dress.</p>
		<p>Core Skills:</p> <ul style="list-style-type: none"> ➤ Reveal the various types of Balance in dress design ➤ Application of Rhythm, Emphasis, Harmony and Proportion application in dress design ➤ Collect different garment collection that are appropriate to the principles of Design
IV	Colour and its application	<p>Colour - definition, colour theories - Prang colour chart and Munsell colour system, Dimensions of colour and its application - hue, value, intensity, warm, cool and neutral colors. Psychological attributes of colours. Colour harmonies related colour harmonies – Achromatic, Monochromatic, Analogous colour harmonies. Colour harmonies contrast colour harmonies – Single Complementary, Double complementary, Split complementary, Clash, Triadic, Quadruple, Tetradic/ Double split colour harmonies.</p>
		<p>Core Skills:</p> <ul style="list-style-type: none"> ➤ Create a Prang color Wheel ➤ Propose the value chart of a colour ➤ Plan the intensity chart of a colour ➤ Application of colour harmonies in dress designing.
V	Design development for various Figure types	<p>Planning and design the suitable dress for various short/tall figure types and figure irregularities – thin figure, stout figure, slender figure, pear/triangle figure, hourglass figure, column/rectangular figure, trapezoid/quadrilateral figure, diamond figure, wedge/inverted triangle figure, overall roundness/oval/apple figure. Factors influencing design application for different age group, occasions and seasons. Wardrobe Planning - Design development for formal, casual, party and sports wears for men, women and kids based on the location.</p>
		<p>Core Skills:</p> <ul style="list-style-type: none"> ➤ Give styling ideas for different figure types. ➤ Develop a Dress designs for formal, casual, party and sports wears.

READING LISTS AND RESOURCES

Compulsory

1. Fashion Terminology, *Joane E. Blair*, Prentice Hall, 1992
2. Elements of Fashion and Apparel Design, *G. J. Sumathi*, New Age International, 2007
3. The Fashion Design Manual, *Macmillan Education AU*, 1996
4. The Fundamentals of Fashion Design By Richard Sorger, Jenny Udale · 2006
5. Contemporary Color: Theory and Use, *Steven Bleicher*, Cengage Learning, 2011
6. Colour Design: Theories and Applications Best, Elsevier, 2012

Highly Recommended, not Compulsory

7. Textiles and Fashion: Exploring Printed Textiles, Knitwear, Embroidery, Menswear and Women's wear, Jenny Udale, A&C Black, 2014
8. The Very Best Dress, *Erick Howard, Karan Kerry*, 2014 Crafts & Hobbies
9. Form, Fit, Fashion: All the Details Fashion Designers Need to Know But Can Never Find, *Jay Calderin*, Rockport Publishers, 2009

Good for Students who have Future Interests

10. Fashion Design: Process, Innovation and Practice, *Kathryn McKelvey, Munslow* John Wiley & Sons, 2011
11. Fashion Design: The Complete Guide, *John Hopkins*, A&C Black, 2012

SEMESTER – I**CORE COURSE PRACTICAL****PORTFOLIO – BASIC SEAMS AND APPAREL MANUFACTURING TECHNIQUES****Course Code:** 23UPTAD2L01**Marks:** 100 Marks (Internal-40; External-60)**L:T:P** – 3:0:2**Course Duration** : 75 Hours**Credit:** 04**Course Description:**

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Integrate the basic hand sewing techniques to produce finished samples.	Psychomotor
CO2	Create samples by combining basic seams and seam Finishes	
CO3	Develop various component parts of the garments with help of Industrial sewing machineries.	
CO4	Combine different garment components and ensure its quality.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	L	H	M	M	H	H	M	L	L	L	
CO2	M	H	M	M	H	H	M	M	L	L	
CO3	M	H	M	M	H	H	H	M	L	L	L
CO4	M	H	H	H	H	H	H	H	M	M	M

Unit	Unit Title	Learning Chapters
I	Hand Sewing	Button hole, Different button sewing - 4hole, 2hole, Snap button, Hooks, Hemming, Patch work
II	Basic seams and seam Finishes	Basic Seams – Plain, Welt, Single Top Stitch, Double Top Stitch, Flat felt seam, Slot seam and piped seam Basic seam finishes – Pinked finish, Edge stitch finish, Double edge stitch finish, Facing & Bound edge finish, Fullness – Dart, Tucks, Pleats and Gathers
III	Parts of a Garment and Assembling	Different Collars – Stand collar, Band collar and Shawl collar, Different pockets – Patch pocket, Welt pocket, Different Sleeve – Plain, Raglan, puff, sleeve cuff, Different yokes- Single and Double, Different Placket Shirt front placket, Sleeve placket and Zipper Placket and Assembling
IV	Assembling a Garment	Assemble Component parts of Men's shirt.
Laboratory equipment's: Hand Needles, Single Needle Lock Stitch Machine, Over Lock Machine – 3T, 5T		

READING LISTS AND RESOURCES

Compulsory

1. Sewing Guide: Hand Sewing, Machine Sewing and Examples James Oszust, 2020 Merchant & Mills
2. Sewing Book Hand Sewing Techniques / Machine Know-How / Tools / Notions / Projects /Patterns by Carolyn N.K. Denham , 2014
3. Handbook of Sewing Stitches An Illustrated Guide to Techniques and Materials by Lorna Knight, 2019
4. How to Sew with Over 80 Techniques and 20 Easy Projects by Mollie Makes, 2018
5. Guide to Basic Garment Assembly for the Fashion Industry by Jayne Smith, 2011

Highly Recommended, not Compulsory

6. The Sewing Machine by Rebekah Dorn, 2008.
7. Super Stitches Sewing a Complete Guide to Machine-sewing and Hand-stitching Techniques by Nicole Vasbinder , 2014
8. Handbook for Fashion Designing: Best Drafting Techniques, Ritu Jindal,1998
9. Apparel Engineering and Needle Trades Handbook, 1960

Good for Students who have Future Interests

10. Apparel Manufacturing Technology By T. Karthik, P. Ganesan, D. Gopalakrishnan, 2017
11. Sewing for Fashion Designers By Anette Fischer, 2015
12. Super Stitches Sewing A Complete Guide to Machine-sewing and Hand-stitching Techniques

SEMESTER – I
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M01

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – I

SKILL ENHANCEMENT COURSE

INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT

Course Code: 23UPTAD2I01

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 21 Hours/Week

Course Duration : 10-15 days

Credit: 04

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.

SEMESTER – I
SKILL ENHANCEMENT COURSE (Foundation Course)
BASIC HAND EMBROIDERY

Course Code: 23UPTAD2S01

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:3:0

Course Duration : 45 Hours

Credit: 03

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Perform the different types of basic and flat hand embroidery stitches in fabric.	Psychomotor
CO2	Execute the different types of embroidery filling stitches in fabric.	
CO3	Carry out the different types of hand embroidery knotted stitches in fabric.	
CO4	Combine the basic and decorative floral stitches in the fabrics. And create products using the various stitches.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	H	H	M	M	H	M	M	H	M
CO2		H	H	H	M	M	H	M	M	H	M
CO3		H	H	H	M	M	H	M	M	H	M
CO4		H	H	H	M	M	H	M	M	H	M

Unit	Unit Title	Learning Chapters
I	Basic / flat stitches	Running Stitch (Whipped & Laced), Backstitch, Chain stitch, Stem stitch, Herring bone, Seed stitch, Cross stitch, Couching, Split stitch, Chevron stitch.
II	Filling stitches	Satin Stitch, Short and long satin, Cretan stitch, Fishbone Stitch, Button hole Stitch, Blanket stitch, Feather Stitch, Fly Stitch Kadai Kamal, Pattern Darning, Roumanian Stitch, Weaving Stitch.
III	Knotted stitches	French Knot, Long French knot, Peking Knot, Bullion knot, Corel Stitch
IV	Floral embroidery stitches	Lazy Daisy, Spider Wheel, 3D- Caston, Looped stem stitch, Tassel flower, Pom Pom, Woven Picot stitch flower.
	Core Skills	Create any Product like Neck designs for blouse or kurti, Gifts, wall decors and accessories.

READING LISTS AND RESOURCES

Compulsory

1. Embroidery Stitches – Mary Webb, 2006, China, Pages 28 – 34
2. Ritu, Attractive Embroidery Designs, Indica Publishers, 1995.
3. Shailaja m. and Naik. D., Traditional Embroideries of India, KPH Publishing Corporation, 1996.
4. Treasury of Smocking Designs, Allyne S. Holland, New York, 1985.
5. Embroidery Stitches – Mary Webb, 2006, China, Pages 28 – 34

Highly Recommended, not Compulsory

6. How to Teach Yourself Cutwork Embroidery by DueepJyot Singh, John Davidson, 2017
7. Learning Patchwork - Traditional Patchwork Techniques By DueepJyot Singh, John Davidson, 2016
8. Learn to Quilt By DueepJyot Singh, John Davidson, 2016
9. Learning Decorative Stitches The Art of Shirring and Smocking By DueepJyot Singh, John Davidson, 2016

Good for Students who have Future Interests

10. Design for Embroidery, from Traditional English Sources By Constance Howard, 1956
11. Modern Embroidery Series, MBD Publishers, 1995.
12. Kit Pynan and Carole, The Harmony Guide to Decorative Needle Craft, Lyric Books Ltd., 1982
13. https://www.usha.com/sites/default/files/sewing_tutorials/machine-embroidery-book.pdf

இரண்டாம் பருவம்

மொழிப்பாடம்

தமிழ் தொழிற்கல்வி II

பாடக் குறியீட்டெண்: 23UPTAD2T02

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

இப்பாடநெறி மாணவர்களுக்கு பேச்சுக்கலையின் தனித்தன்மையை மாணவர்களுக்கு உணரச்செய்து சமூகத்தில் சிறந்த பேச்சாளராக உருவாக்குதல் மற்றும் மொழிப்பெயர்ப்பின் தேவையை உணரச் செய்கிறது. மேலும் தமிழ் இலக்கியங்களில் குறிப்பிட்டுள்ள ஆளுமைத்திறன் உத்தியைக் கற்றுக் கொள்வதோடு தமிழ் வழியில் தற்காலத் தகவல்தொடர்புச் சாதனங்களை பயன்படுத்தும் திறனை வளர்க்கவும் உதவுகிறது.

Course Learning Outcomes (CLOs)

இப்பாட நெறி முடிவுறும் போது மாணவர்கள்

S. No	Outcomes	Domains of Learning
CLO1	பேச்சுக்கலையில் திறன் கொண்டவர்களாகுதல்	Cognitive
CLO2	மொழிப்பெயர்ப்புக்கான ஆற்றலைப் பெற்றவர்களாகுதல்	
CLO3	எழுத்தாற்றல் திறன் மிக்கவர்களாகுதல்	
CLO4	தமிழ் பண்பாட்டுடன் கூடிய சிறந்த ஆளுமை திறன் கொண்டவர்களாகுதல்	
CLO5	இணையவழி மொழி கற்றல் திறன் உடையவர்களாகுதல்	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	L	L	L	M	H	L	L
CO2				H	L	L	L	M	H	L	L
CO3				H	L	L	L	M	H	L	M
CO4				H	L	L	L	M	H	L	M
CO5				H	L	L	L	M	H	L	M

Unit	Unit Title	Learning Chapters
I	பேச்சுத்திறன்	பேச்சுக்கலை - அறிமுகம், இன்றியமையாமை - பேச்சின் தன்மைகள் - வள்ளுவரின் கருத்துக்கள் - இனிய சொற்களைக் கூறுதல் - சொல் வன்மை - மேடை நாகரிகம் - நேர்காணலுக்கு பயிற்சி அளித்தல்- பேச்சுக்களங்கள் - உள்ளரங்கம் - வெளியரங்கம் - விழாப் பேச்சுக்கள் - பொதுக்கூட்டங்கள் - சொற்பொழிவுகள் - மேடை விவாதங்கள் -பட்டிமன்றம் - வழக்காடு மன்றம் - கருத்தரங்கம்- சமூகம் சொற்போர் இவை பற்றிய பங்கேற்பு நுட்பங்கள்- உரைகள் - வரவேற்புரை - தலைமையுரை - சிறப்புரை - வாழ்த்துரை - வரவேற்பாளர் - முகவர் போன்ற பணிகளுக்கேற்ற பேச்சுத்திறன் தொடர்பான நுட்பங்கள்
II	மொழிப்பெயர்ப்பு	மொழிப்பெயர்ப்பின் இன்றியமையாமை - மொழிப்பெயர்ப்பியல் கோட்பாடுகளின் அடிப்படைகள் - மொழி வழக்குகளும் மொழி பெயர்ப்பும் - பொருளைப் பொருத்தமாக அமைத்தல் - சொல்லாக்கம்- மொழிப்பெயர்ப்பின் மூன்று படிநிலைகள்

		- பழமொழி - வழக்குச்சொல்- பத்துறைச் சொற்கள்- மொழிப்பெயர்ப்பு - கலைச்சொற்கள் உருவாக்கம் இணையவழி மொழியாக்கப்பயிற்சி
III	படைப்புத்திறன்	நெடுந்தொடர் எழுத்தாக்கப்பயிற்சி, அச்சிதழ்களுக்கு செய்தி கட்டுரை எழுதுதல்- தொலைக்காட்சி நிகழ்ச்சிகளுக்கு எழுதுதல், வசனம் எழுதும் பயிற்சி- சிறுகதை எழுதும் பயிற்சி, கவிதை எழுதும் பயிற்சி
IV	ஆளுமைத்திறன்	தலைமைப் பதவியின் பண்புகள் - தனி மனித பண்புகளும் வளர்ச்சிகளும் - தனி மனிதன் பின்பற்ற வேண்டிய மதிப்புகள்- மக்கள் தொடர்புடைய சாதனங்களின் நெறிமுறைகள் - விளம்பர நெறிமுறைகள்- தொழில் கொள்கையை வளர்த்தல் - தொழில் முனைவோர் உளவியல் பயன்கள் - தொழில் நெறிமுறைகள்- பணி ஒழுக்க நெறியை வளர்த்தல்- தனிநபர் திறன் - ஆர்வத்தினை கண்டறிதல்தொழில் மற்றும் பணி தேவைகளை அறிதல்
V	இணையத்தமிழ்	தமிழ் இணையம் - செயல்பாடுகள் மற்றும் பயன்பாடுகள்- பல்லாடகம் - இணையம், மின்னஞ்சல் மற்றும் இணைய நூலகம்- புதிய இணையத்தள உருவாக்கம்- வலைப்பூக்கள் புலனம், முகநூல், வலையொலி, கீச்சகம், படவரி, அளாவி, பற்றியம், காயலை, ஊடலை, அருகலை, பகிரலை, ஆலலை, இயங்களை, முடக்கலை, விரலி, தடங்காட்டி

பார்வை நூல்கள்

14. டாக்டர் ம. திருமலை, ஁ன் - 2015, பேச்சுக்கலை, மீனாட்சிபுத்தகநிலையம், மதுரை
15. ரா. சீனிவாசன், -1960, மொழியியல், முதற்பதிப்பு, சைவ சித்தாந்த நூற்பதிப்பு, சென்னை.
16. டேல் கார்னகி, 2012, மேடைப் பேச்சுக்கலை, கண்ணதாசன் பதிப்பகம், சென்னை
17. நடன.காசிநாதன், க.தாமோதரன், ச.ஹரிகரன், தமிழ்நாடு அரசு தொல்பொருள் ஆய்வுத்துறை, வெளியீடு, 1980.

வலைதள ஆதாரங்கள்

18. <https://www.tamilvu.org>
19. <https://www.tamilvu.org/ta/library-libcontnt-273141>
20. <https://noolaham.org/>
21. <https://eluthu.com/>
22. <https://tamilkatturai.com/>

SEMESTER - II
ENGLISH
PROFESSIONAL ENGLISH - II

Course Code: 23UPTAD2P02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It exposes the students to the important nuances of business communication and to initiate them into the realm of professional communication

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Adapt easily into the workplace context, having become communicatively competent	Psychomotor
CO2	Learners hone their interpersonal skills in vital areas	
CO3	Recognize how knowledge and information is accessed, shared and produced	
CO4	Develop dispositions for learning such as creativity, imagination and connection.	
CO5	Learn to successfully structure and word any academic writing assignment.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	M	L	M	H	H	M	M
CO2				H	M	L	H	H	H	M	M
CO3				H	M	L	H	H	H	M	M
CO4				H	M	L	H	H	H	M	M
CO5				H	M	L	H	H	H	M	M

Unit	Unit Title	Learning Chapters
I	Communicative Competence	a) Listening to talks/lectures b) Small group discussions based on the listening and reading passages c) Reading texts followed by comprehension activities d) Summary writing based on the reading passages e) Grammar: Modal verbs
II	Persuasive Communication	a) Listening to a product launch b) Debates and Just A Minute Activities c) Reading texts on advertisements and answering inferential questions d) Dialogue writing e) Grammar: Preposition and Conjunction

III	Digital Competence	a) Listening to interviews b) Interviews with subject specialists
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		c) Reading comprehension (Essay on digital competence for Academic and Professional life) d) Creating web pages and Vlogs e) Grammar: Tense (Present)
IV	Creativity and Imagination	a) Listening to short academic videos b) Making oral presentations through short films c) Essay on Creativity and Imagination d) Script writing for short film, Creating flyers and Brochures and Poster making e) Grammar: Reported Speech
V	Workplace Communication & Basics of Academic Writing	a) Listening videos b) Short academic presentation using PowerPoint c) Reading Product files, Circulars, Minutes of Meeting d) Paraphrasing e) Grammar: Punctuation and Reported Speech

REFERENCES

REFERENCE BOOKS

10. John Selly, *Oxford Guide to Speaking and Writing*, 2000
11. Neal, James M. and Suzanne S. Brown. *News Writing and Reporting*. Surjeet Publications. Delhi. 1997.
12. McCarthy, Michael, Felicity O' Dell, *English Idioms in Use*. CUP 2004 rpt
13. Agarwala N. K., (2014). *English Grammar and Composition*. New Delhi: Goyal Brothers Prakhasan.
14. Kokila S. Thangasamy, (2014). *Communicative English for College Students*. Gandhigram (T.N): Arichum Blooms.

JOURNALS AND DOCUMENTS

15. https://r.search.yahoo.com/_ylt=AwrKBxxC34Zkm8APw2S7HAX.;_ylu=Y29sbwNzZzMEcG9zAzMEdnRpZAMEc2VjA3Ny/RV=2/RE=1686589378/RO=10/RU=https%3a%2f%2fwww.senguarts.co.in%2fuploads%2fMaterials%2fTANSCHES_CommunicativeEnglish.pdf/RK=2/RS=g60e6voulUb4ImZhRIYeEZrNms-
16. https://r.search.yahoo.com/_ylt=Awr1SUxD8IZkaVAQrDq7HAX.;_ylu=Y29sbwNzZzMEcG9zAzIEdnRpZAMEc2VjA3Ny/RV=2/RE=1686593731/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f342869636_Functional_English/RK=2/RS=D3f7twhwgoCzcUSKcXtxuZ6M1UI-
17. https://r.search.yahoo.com/_ylt=Awr1SUyaAohkWzoklIK7HAX.;_ylu=Y29sbwNzZzMEcG9zAzEEdnRpZAMEc2VjA3Ny

SEMESTER – II
GENERIC ELECTIVE COURSE
INDUSTRIAL GARMENT MACHINERIES AND EQUIPMENTS

Course Code: 23UPTAD2E02

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:2:0

Course Duration : 60 Hours

Credit: 04

Course Description:

This course knowledge the student about the garment manufacturing units, departments, their activities and roles, uses of machinery in various departments and importance of the equipment.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Describe the apparel manufacturing operation involved in various departments in the apparel industry.	Cognitive
CO2	Identify the industrial machineries involved in various garment process	
CO3	Classify the special attachments of the industrial sewing machineries for high productivity	
CO4	Arrange the operation-wise machine layout for woven and knitted garments	
CO5	State the various equipments used in ironing and packing in the garment manufacturing unit.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				M	H	H	M	H	H	L	M
CO2		H	L	M	H	M	M	M	M	L	M
CO3		H	L	M	H	M	M	M	M	L	M
CO4		H	L	M	H	M	M	M	M	L	M
CO5		M	L	M	H	M	M	M	M	L	M

Unit	Unit Title	Learning Chapters
I	Departments in Apparel manufacturing Unit	Admin departments – Human Resource, Accountancy, Security, Electrical and Machine Maintenance, Labour welfare and health Production department – Merchandising, Accessory Stores, Pattern making, Sampling, Fabric Cutting, Sewing, QAD, Packing – Finishing, Packing, Final Inspection and Shipment.
II	Garment industry machineries	General machineries – Boilers, Bio matric and Power generator. Cutting machineries – Plotter, spreader, cutting machine by hand, band knife, round knife, straight knife machine, automatic cutter, Sticking machine. Sewing machineries – Single Needle lock stitch (SNLS), Double Needle Lock stitch (DNLS), Over lock machine-and its type, Edge cutter with SNLS, Welt Pocketing, Auto Zig, Feed of Arm (FOA), Edge cutter with SNLS, Flat lock machine – and its types.

		Finishing machineries – Bar tack, Button hole machine, button sewing machine, and Metal detection machine (MDM).
III	Special attachments	Classification of Sewing machine Guide attachments - Edge guide, Presser foot, Hemming foot, zipper foot. Classification of Sewing machine positioning attachments - Folder and Binders
IV	Machine Layout	Machine layout-types, Procedure, Techniques and operation bulletin. Stitching operation wise layout and machineries used for shirt manufacturing, Trouser, T-shirt
V	Fusing and pressing equipments	Fusing machine – Working procedure and types. Ironing – Pressing – Purpose of pressing – Types of pressing methods – Pressing, equipment and methods – Iron and steam press. Sucking – purpose – Packing machine and method of packing.

READING LISTS AND RESOURCES

Compulsory

1. Apparel Machinery and Equipment's By R. Rathinamoorthy, R. Surjit , 2015
2. Automation in Textile Machinery Instrumentation and Control System Design Principles By L. Ashok Kumar, M Senthil Kumar, 2018
3. Industrial engineering in apparel production. Babu, r. V Wood head publishing, 2012
4. Introduction to clothing manufacture. Wiley. Cooklin, g, 2006
5. Cooklin's garment technology for fashion designers. John wiley. Cooklin G, Hayes, S. G., Mcloughlin, J., & Fairclough, d, 2012

Highly Recommended, not Compulsory

6. Apparel manufacturing: sewn product analysis. Pearson/prentice hall. Glock, r. E., &kunz, g. I, 2005
7. The sewing machine attachment handbook. Krause publications. Phillips, c., 2009
8. Apparel machinery and equipment's. Rathinamoorthy, R., & Surjit, R., 2015
9. Guide to basic garment assembly for the fashion industry. John Wiley. Smith, j., 2013

Good for Students who have Future Interests

10. <http://www.ngaishinhk.com/en/text.asp>
11. Carr and Latham's technology of clothing manufacture. John Wiley. Tyler, d. J., 2009
12. Complete photo guide to sewing, sewmucheasier.com/guide to your sewing machine presser feet.

SEMESTER – II
SKILL ENHANCEMENT COURSE
BASIC DRAPING PRACTICAL

Course Code: 23UPTAD2S02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:0:2

Course Duration : 30 Hours

Credit: 02

Course Description:

The course provides unique training for the role of Costume Designer, allowing students to visualize three-dimensional views of imaginative designs and examine the fit of the dress for personalized designs using draping techniques. The students are learning basic draping techniques to develop uniquely in the apparel field of design.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Prepare muslin cloth and recognize the measurements for pattern blocking	Psychomotor
CO2	Demonstrate basic front bodice, basic back bodice, Skirt and Sleeve in the selective dress form.	
CO3	Develop the darts variations in draped pattern bodice.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M	H	H	H	M	H	L	L	L	L	L
CO2	M	H	H	H	M	H	L	L	L	L	L
CO3	M	H	H	H	H	H	M	M	L	L	L

Unit	Unit Title	Learning Chapters
I	Basic Preparation For Draping	<ul style="list-style-type: none"> • Equipment Needed • Preparation of Muslin for Draping • Blocking • Pressing
II	Basic Patterns	<ul style="list-style-type: none"> • Basic bodice - Front Fullness, Tucks, Pleats, Gathers • Basic bodice - Back • Basic Skirt -knife pleat & box Pleat • Basic Sleeve
III	Fullness in Bodices	Darts variations in Front bodice Back bodice and basic, Skirt

READING LISTS AND RESOURCES

Compulsory

1. Draping Techniques for Beginners By Francesca Sterlacci, 2019
2. Fitting Patterns Using Draping Techniques By Connie Amaden-Crawford, 2011
3. Designing by Draping Methods by Woman's Institute of Domestic Arts and Sciences (Scranton, Pa.), 1948

Highly Recommended, not Compulsory

4. Cutting and Draping Party and Eveningwear Dressmaking and Pattern Cutting for Special Occasion Clothes By Dawn Cloake , 1998 & 2016

Good for Students who have Future Interests

6. <https://www.universityoffashion.com/disciplines/draping/>
7. <https://www.moodfabrics.com/blog/a-quick-guide-to-draping-tips-and-fabrics/>

SEMESTER – II
CORE COURSE PRACTICAL

DRAFTING AND COMPUTERIZED PATTERN MAKING PRACTICAL

Course Code: 23UPTAD2L02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 2:0:4

Course Duration : 90 Hours

Credit: 04

Course Description:

The course will practically guide the students to make the pattern blocks in industrial standards. Pattern Making Software is used by many garment designers to create elaborate computerized patterns, its grading and marker making which is the key requirement in the garment manufacturing unit. By the completion of this course students will be well skilled in customize the basic pattern into different size or styles and CAD software which enhances their career development.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Execute the basic bodice blocks for Men, Women and Children.	Cognitive
CO2	Develop various styles of garment patterns from basic pattern blocks by manual and using CAD software.	
CO3	Create different pattern sizes from the actual pattern size and Build marker planning using software.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	H	H	H	H	H	H	M	L	H
CO2		H	H	H	H	H	H	H	M	L	H
CO3		H	H	H	H	H	H	H	M	L	H

Unit	Unit Title	Learning Chapters
I	Basic Bodice	Drafting of Basics bodices for Men, Women, and Children.
II	Basic bodice to garment styles.	<ul style="list-style-type: none"> ➤ Converting basic bodice in to garment styles. ➤ Create patterns using software <ul style="list-style-type: none"> ○ Men’s wear (2variations styles) in knits and woven ○ Women’s wear(2variations styles) in knits and woven ○ Kid’s wear(2variations styles) in knits and woven
III	Pattern Grading & Marker Planning	Different types of garment grading and marker planning to be implemented by drafting and computerized method. <ul style="list-style-type: none"> ○ Men’s wear, Women’s wear and Children’s wear

READING LISTS AND RESOURCES

Compulsory

1. Patternmaking Comprehensive Reference for Fashion Design By Sylvia Rosen, 2004
2. Techniques of Drafting And Pattern Making By Padmavati B, 2009.
3. Pattern Cutting and Making Up The Professional Approach Martin Shoben, Janet Ward , 1987.

Highly Recommended, not Compulsory

4. Pattern-drafting for Fashion Seam Assembly &Finishing By Teresa Gilewska , 2013
5. Practical Pattern Making By Lucia Mors, Lucia Mors de Castro, Isabel Sánchez Hernández , 2015

Good for Students who have Future Interests

6. Factors Affecting Trade Patterns of Selected Industries, First Annual Report, Inv. 332-477
7. Metric Pattern Cutting for Men’s wear, Winifred Aldrich, John Wiley & Sons, 2012

SEMESTER – II
QUALIFICATION PACK – I (LEVEL 4)

SPECIALIZED SEWING MACHINE OPERATOR (AMH_Q2301_v2.0)

Course Code: 23UPTAD2Q01

Marks: 100 Marks (Assessment by NSDC)

L:T:P – 2:3:2

Course Duration : 105 Hours

Credit: 06

Course Description:

A Sewing Machine Operator, also called a Stitcher or Machinist is an important job-role associated with Apparel sector. The primary responsibility of a machinist is to sew fabric to produce apparels. A Specialized Sewing Machine Operator is responsible for operating the specialized sewing machine to sew different kinds of stitches on fabric/garments in the apparel industry.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Maintain the work area, tools and machines and observe green processes in job roles	Psychomotor & Cognitive
CO2	Adhere the potential risks associated with hazardous processes and guidelines for medical emergencies.	
CO3	Simplify the operation or give design effects in Flat lock Machine Over lock Machine Feed-of-the- arm Welt Attachment Machine Waistband Attachment Machine (KANSAI) Other specialized machines.	
CO4	Contribute to achieving the quality in stitching operations	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H		H	H	H	H	H	H	H	M
CO2	H	H	H	H	H	H	H	H	H	H	M
CO3	M	H	H	H	H	H	H	H	H	H	M
CO4		H	H	H	H	H	H	H	H	H	M

Unit	Learning Chapters (http://sscammh.com/approvedQPNo.php)
I	Reference ID:AMH/N0102: .Maintain work area, tools and machines and Greening of Job Roles
II	Reference ID: AMH/N0103: Maintain health, safety and secure work place with Gender and PwD Sensitization
III	Reference ID: AMH/N2301: Carry out different types of stitches using an specialized sewing machine
IV	Reference ID: AMH/N2302: Contribute to achieve quality in sewing work

READING LISTS AND RESOURCES

- https://sscammh.com/admin/app/webroot/files/ptno/qppo1652196549AMH_Q2301_v2.0-Specialized-Sewing-Machine-Operator.pdf
- The Sewing Machine By Rebekah Dorn, 2008
- Handbook for Fashion Designing: Best Drafting Techniques Ritu Jindal, 1998
- Apparel Manufacturing Technology By T. Karthik, P. Ganesan, D. Gopalakrishnan, 2017

SEMESTER - II
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – II

SKILL ENHANCEMENT COURSE

INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT

Course Code: 23UPTAD2I02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 21 Hours/Week

Course Duration : 25-30 days

Credit: 04

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.

SEMESTER – II
SKILL ENHANCEMENT COURSE

PORTFOLIO – TRAINING ON QUALITY IN APPAREL PRODUCTION

Course Code: 23UPTAD2S03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:2:0

Course Duration : 30 Hours

Credit: 02

Course Description:

The course will practically guide the students to predict the machineries for the particular style production. It also enables the students to professionally customize the profiles and templates for making component parts in Apparel manufacturing as well as maintain quality parameters in the garment unit.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	List out the operation sequences and machineries for various garment production.	Psychomotor
CO2	Develop various templates and reports of garment production process	
CO3	Examine the production procedures in garment production floor.	
CO4	Evaluate quality parameters in the garment production floor	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	H	H	H	M	H	H	M	M	H
CO2		H	H	H	H	M	H	H	H	M	H
CO3	M	H	H	H	H	H	H	H	H	M	M
CO4	H	H	M	H	H	H	H	H	M	M	M

Unit	Unit Title	Learning Chapters
I	Analyze garment operation and machineries	<ul style="list-style-type: none"> • First Garment • Operation bulletin • Critical or bottle neck operations • List of machines used for particular style – Shirt, T-shirt, Trousers and Inner wear.
II	Production Improvements	<ul style="list-style-type: none"> • Prepare templates • Prepare profiles • Prepare marking patterns • Re-cutting & Replacements • Input and output reports making
III	Production Monitoring	<ul style="list-style-type: none"> • Analyze hourly report – Batch meeting • Line balancing – operator adjustment • Operator motivation processes – Grading system
IV	Quality Analyze	<ul style="list-style-type: none"> • Measuring techniques in measurement tape • Follow traffic light system • Follow bundle and cut panels numbering • AQL - Inline and end line check reports and Reworks account

READING LISTS AND RESOURCES

Compulsory

1. Management of Technology systems in Garment Industry, Gordana Colovic, Woodhead Publishing, New Delhi, 2011.
2. Apparel Manufacturing Technology T. Karthik, P. Ganesan, D. Gopalakrishnan, 2016
3. Process Selection from Design to Manufacture by K. G. Swift, J. D. Booker, 2000

Highly Recommended, not Compulsory

4. Apparel International The Journal of the Clothing and Footwear Institute · Volume 28, 1997
5. Advances in Apparel Production, Catherine Fairhurst, Woodhead publications, Cambridge, UK, 2008.
6. Management of Technology Systems in Garment Industry Gordana Colovic, 2011

Good for Students who have Future Interests

7. Sourcing Practices in the Apparel Industry, Marlon Lezama, Brain Webbar, Charles Dagher, The Commonwealth Secretariate, UK, 2004.
8. Apparel Manufacturing IVth Edition, Ruth E Glock, Grace I Kunz, Kindersley Publications, New Delhi, 2005.
9. Garment Manufacturing – Processes, practices and Technologies, Prasantha Sarkar, Mudranik Technologies Pvt Ltd, New Delhi, 2015.

மூன்றாம் பருவம்

மொழிப்பாடம்

தமிழ் தொழிற்கல்வி III

பாடக் குறியீட்டெண்: 23UPTAD2T03

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

இப்பாடநெறி மாணவர்களுக்கு தமிழர் ஆடை பற்றிய நூல் இன்மையை நீக்குதற்கும், தமிழர் ஆடையைப் பற்றிய அறிவைப் பெறுதற்கும், அதன் வழிப் புலனாகும் தமிழரின் வாழ்வியற் கூறுகளை அறிதற்கும் உதவுகிறது.

Course Learning Outcomes (CLOs)

இப்பாட நெறி முடிவுறும் போது மாணவர்கள்

S. No	Outcomes	Domains of Learning
CLO1	தமிழர் நாகரீகம், பண்பாடு, நில அடிப்படையிலான தொழில்கள் சமூக அமைப்பு மற்றும் குடும்பவாழ்வுக் குறித்து வகைப்படுத்துவர்	Cognitive
CLO2	ஆடைகளின் தோற்றம் மற்றும் சொற்களை வகையறிந்து வேறுபடுத்துவர்	
CLO3	சங்க இலக்கியம், காப்பியங்கள் மற்றும் பக்தி இலக்கியங்களில் ஆடைப் பற்றிய பதிவுகளைக் கண்டறிந்து கொள்வார்	
CLO4	பொது ஆடைகள் மற்றும் தெய்வங்களுக்கு உடுத்தும் ஆடைகள் குறித்து தமிழ் இலக்கியங்களில் இடம் பெற்ற பதிவுகளை தெளிவாக அடையாளம் காண்பர்	
CLO5	காலம், சூழல், வழிபாடு போன்ற நிலையில் தமிழ் இலக்கியங்களில் ஆடையினைக் கையாளும் முறைகளை தீர்வு காணும் நிலையில் மதிப்பிடுவர்	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	L	M		L	M	L	
CO2			L	H	L	M		L	M	L	
CO3			L	H	L	M		L	M	L	
CO4			L	H	L	M		L	M	L	
CO5		L	L	H	L	M		L	M	L	

Unit	Unit Title	Learning Chapters
I	தமிழர் நாகரீகம், பண்பாடு	தமிழ் மொழி - தமிழ் மக்கள் - நாகரிகமும் பண்பாடும் தமிழரின் திருமணமுறை (மரபு வழி மணம், சேவை மணம், போர் நிகழ்த்தி மணம், துணங்கையாடி மணம், பரிசம் கொடுத்து மணம், ஏறு தழுவி மணம், மடலேறு மணம்) – குடும்ப வாழ்வு.
II	ஆடையின் தோற்றம், வகைகள்	ஆடையின் தோற்றம் - ஆடை பற்றிய விளக்கம் - ஆடைகளின் வகைகள் - ஆடை பற்றிய சொற்கள் (உடை- ஆடை- தழை – நாருடை – துகில் - கலிங்கம் - அறுவை - சிதார் - தாணை - காழகம் - மடி - பட்டு - பூங்கரை நீலம் - தூசு - புட்டகம் - கம்பல் - நூல் - வாலிது - கச்சை - மெய்ப்பை - உத்தரீயம் - போர்வை – கவசம் - அர்த்தம் - ஈரங்கட்டு – கோடி - கூறை – புடைவை - வட்டுடை - வங்கச்சாதர் - வட்டம் - கோசிகம் - காம்பு - நேத்திரம் - நீவி – கலை (இரட்டு – பீதகம் - கோபம் - பரியட்டக்காசு - தேவாங்கு) ஆடை பற்றிய ஆய்வு

III	ஆடை பற்றிய ஆய்வு	கலைக்களஞ்சியம், அகராதிகள் ஆடையை குறிக்கும் சொல் - சங்க இலக்கியத்தில் ஆடை (நற்றிணை, ஐங்குறுநூறு, பரிபாடல், கலித்தொகை, புறநானூறு) - காப்பியங்களில் ஆடை (சிலப்பதிகாரம், மணிமேகலை, சீவகசிந்தாமணி, நீலகேசி, சூளாமணி) - பக்தி இலக்கியத்தில் ஆடை.
IV	பொது ஆடைகள் மற்றும் நம்பிக்கைகள்	குழந்தைகள் - ஆடவர் (அரசர், போர் வீரர்கள், காவலர்கள், முனிவர், துறவியர், பொது மக்கள், புலவர்) - பெண்டிர் (அரசியர், துறவில் மகளிர்) - ஆடையும் அணியும் - பொது ஆடைகள் - ஆடை பற்றிய பழமொழிகள்
V	ஆடையினைக் கையாளும் முறைகள்	காலமும் ஆடையும் (குளிர் காலம், கோடைக் காலம், சிறுபொழுதுக்கேற்ப உடை) - ஆடையும் சடங்குச் சூழலும் (பிறப்பு, மணம், மரணம்) - உறவினர் ஆடை - தகுதியும் ஆடையும் (செல்வம், பதவி) - கைம்பெண்டிர் ஆடை - துறவிகள் (இந்து மதம், புத்த மதம், சமண மதம்) - வழிபாடும் ஆடையும் - ஆடலும் ஆடையும் - நிலமும் ஆடையும் - ஆடையினைக் கையாளும் முறைகள் (விருந்தோம்பல், குறிப்புக் காட்டல், சூதும் ஆடையும்)

பார்வை நூல்கள்

1. பகவதி.கு, தமிழர் ஆடைகள், உலகத் தமிழாராய்ச்சி நிறுவனம், சென்னை, 1980.
2. தட்சணாமூர்த்தி.அ, தமிழர் நாகரிகமும் பண்பாடும், யாழ் வெளியீடு, சென்னை, 2005.
3. வித்தியானந்தன்.சு, தமிழர் சால்பு, பாரி புத்தகப் பண்ணை, 1971.

SEMESTER - III
ENGLISH
PROFESSIONAL ENGLISH - III

Course Code: 23UPTAD2P03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It exposes the students to the important nuances of business communication and to initiate them into the realm of professional communication

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Develop the conversation skills and pronunciation skills by focusing on using effective features of pronunciation	Psychomotor
CO2	Understand the properties of sound	
CO3	Communicate effectively with degree of fluency and accuracy in different social settings	
CO4	Learn the basic skills and procedures for copywriting	
CO5	Develop their intellectual skills	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	M	L	M	H	H	M	M
CO2				H	M	L	H	H	H	M	M
CO3				H	M	L	H	H	H	M	M
CO4				H	M	L	H	H	H	M	M
CO5				H	M	L	H	H	H	M	M

Unit	Unit Title	Learning Chapters
I	Developing conversational ability	a) Listening and speaking b) Reading and writing c) Introduction to academic dictionaries d) Consulting encyclopaedias e) Drafting a questionnaire
II	Sound Modulation	a) Listening and speaking b) Reading and writing c) Synonyms and antonyms d) Use of Thesaurus e) Report writing
III	Developing fluency	a) Listening and speaking b) Reading and writing c) Affixes d) Idioms and phrasal verbs e) Letter Writing

IV	Copy writing	a) Listening and speaking b) Reading and writing c) Hyponyms d) One word substitution e) Email Drafting
V	Writing Component	a) Listening and speaking b) Reading and writing c) Collocation d) Connotation and Denotation e) Project Report writing

REFERENCES

TEXTBOOKS

1. TANSCHÉ, English for Arts and Social Sciences, Government of Tamil Nadu

REFERENCE BOOKS

1. Effective communication skill, Kulbhusan Kumar, RS Salaria, Khanna Publishing House.
2. Learning to communicate-Dr. V. Chellamal, Allied Publishing House, New Delhi, 2003
3. Technical Communication-Principles and Practices by Meenakshi Raman & Sangeeta Sharma, Oxford Univ. Press, 2016, New Delhi.

JOURNALS AND DOCUMENTS

1. https://r.search.yahoo.com/_ylt=Awr1SUxD8IZkaVAQrDq7HAX.;_ylu=Y29sbwNzZzMEcG9zAzIEdnRpZAMEc2VjA3Ny/RV=2/RE=1686593731/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f342869636_Functional_English/RK=2/RS=D3f7twhwgoCzcUSKcXtxuZ6M1UI-
2. https://www.researchgate.net/publication/301351158_Advanced_Skills_for_Communication_in_English_Book_I
3. https://r.search.yahoo.com/_ylt=Awr1SUyaAohkWzoklIK7HAX.;_ylu=Y29sbwNzZzMEcG9zAzEEdnRpZAMEc2VjA3Ny

SEMESTER – III**CORE COURSE****TEXTILES AND APPAREL QUALITY CONTROL****Course Code:** 23UPTAD2C04**Marks:** 100 Marks (Internal-25; External-75)**L:T:P** – 2:2:0**Course Duration** : 60 Hours**Credit:** 04**Course Description:**

This course expedites the students to gain knowledge towards the Quality measures, processes and management system in the Textiles and Apparel Industries. Updated facts towards Quality control make the students to explore more in the industries.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Summarize the concepts of quality its holistic, product, value and customer perspective.	Cognitive
CO2	Interpret standards and certificates for Textile and Apparel sector.	
CO3	Analyzing quality through Inspections, testing tools of quality, its defects and inspection system.	
CO4	Categorize quality standards and its property in trims and accessories	
CO5	Interpret tools used in quality assurance in care labels, eco labels and its instruction	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	H	H	M	H	L	L	
CO2	H	L	M	H	H	H	H	H	M	L	
CO3	H	L	H	H	H	H	H	H	M	L	
CO4	H	L	H	H	H	H	H	H	M	L	
CO5	H	L	H	H	H	H	H	H	M	L	

Unit	Unit Title	Learning Chapters
I	Introduction to Quality	Define Quality ,Quality Control - Definitions of Quality – holistic Perspective, Product Perspective, Produces Perspective, Customer Perspective and Value Based Perspective, Dimensions of Quality,Quality Assurance & Quality Management
II	Standards and specifications	Define Standard, Benefits of Standard, Levels of Standard, Source of Standard - AATCC, ISO, ASTM, INDA, BIS and GINTEX, American Society for Quality, American Apparel and Tc2, American National Standard Quality&OEKO Tex 100 Standards.
III	Inspection Procedures & Defects	Managing quality through Inspection, Managing quality through Testing, Seven tools of qualities. Definition of Inspection-Raw Materials-Inspection-In process Inspection-Final Inspection,4-point system, 10-point system. Defect. Inspection of Sewing Thread - Zippers – Button, Buckles, Snap Fasteners. In process Inspection -Spreading, Cutting, Sewing and Pressing/Finishing.

IV	Quality control standards	Quality control standards for sewing thread, seam strength, seam properties, Interlinings, elastic, waistband, zippers, sewing threads, buttons, and laces. Accessories testing -Inspecting garments using spec sheets. Button quality testing - Interlining quality testing - Quality procedures for packing a shirt.
V	International care labelling system	Concepts of TQM - tools used for quality assurance - Care label -labelling Instructions and eco labels specification- International care labelling system-European -Japan-Canada-British care labelling systems.

READING LISTS AND RESOURCES

Compulsory

- 1 Mehta V., –Managing quality in the apparel industry ", New Age International, Chennai, 1998
- 2 E-Study cylinder for acceptance sampling quality in control by Edward G.Schilling
- 3 Quality Management ", Textile Progress, The Textile Institute, Manchester, 1998
- 4 Mehta P.V. –An Introduction to Quality Control for the Apparel Industry ", Marcel Dekker, 1992.

Highly Recommended, not Compulsory

- 5 The Fundamentals of Quality Assurance in the Textile Industry , Stanley Bernard Brahams, First edition, published , 2016.
- 6 –The Quality Toolbox , Second Edition - Nancy R. Tague, Published 2013, ISBN: 978-0-87389-871-3
- 7 Quality Audits For Improved Performance , Third Edition, Dennis R. Arter , Published 2002, ISBN: 978-0- 87389-570-5

Good for Students who have Future Interests

- 8 Process Quality Control Troubleshooting and Interpretation of Data, Fourth Edition, Ellis R. Ott, Edward G. Schilling, Dean V. Neubauer, Published, 2005

SEMESTER - III
DISCIPLINE SPECIFIC ELECTIVE COURSE
FASHION ILLUSTRATION PRACTICAL

Course Code: 23UPTAD2E03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:0:4

Course Duration : 30 Hours

Credit: 02

Course Description:

Fashion Illustration is the specialty of conveying design thoughts in a visual structure that starts with representation, drawing and painting and furthermore known as Fashion portraying. It is principally utilized by style architects to conceptualize their thoughts on paper.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Create different art styles and shadings by adapting the basic media and tools in illustration.	Psychomotor
CO2	Replicate the scenarios of the nature and other objects with various perspectives.	
CO3	Develop the Human figures by transforming the head theories	
CO4	Application of colours in garment designing	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			H	H	L	L	H			L	H
CO2			H	H	L	L	H			L	H
CO3			H	H	H	L	H			L	H
CO4			H	H	H	L	H			L	H

Unit	Unit Title	Learning Chapters
I	Basic media and tools with shading	Pencil & colour mediums - Colour pencils, Poster colour/ water colour, Acrylic, Charcoal and Pastel. Lines and Shading - Types. Introduction to Perspective & its types.
II	Human figure study	Basic parts of human bodies - Basic Observing figures – using lines – Head Theory – 8 Head, 10 Head and 12 Head (Stick, Block and Flesh) - Applications of different postures and shades.
III	Accessories and Ornaments	Ornaments: Hair ornaments, Earrings, Neck ornaments, Rings, Bangles/bracelet, Anklets, Accessories: Hair accessories, Glasses/Specs, Watch, Belt, Cap, Foot wear, Bags, Purse/wallet - used for men, women and kids.
IV	Color applications in Garment designing	Prank Color Chart, Value Chart, Intensity Chart, Color Harmonies application on fashion figures. Replica art from Fashion Magazines. Create garments using fabric swatch.

READING LISTS AND RESOURCES

Compulsory

1. Fashion Illustration: Basic Techniques Julian SeamanBatsford, 1996
2. Essential Fashion Illustration: Poses, 2007
3. Fashion Illustration Flat DrawingBy Daniela SantosQuartiino, Catherine Collin . 2007
4. Fashion Illustration Inspiration and Technique By Anna Kiper, 2011

5. A Modern Perspective on Type Theory From Its Origins Until Today By F.D. Kamareddine, T. Laan, Rob Nederpelt, 2004

Highly Recommended, not Compulsory

6. Fashion Illustration Techniques A Super Reference Book for Beginners By Zeshu Takamura, 2012
7. Perspective, Projections and Design Technologies of Architectural Representation, 2013

Good for Students who have Future Interests

8. <https://schoolofsketching.com/blog-in-english/perspective>
9. <https://study.com/academy/lesson/one-point-perspective-drawing-definition-examples.html>
10. <https://www.liveabout.com/perspective-drawing-definition-1123070>
11. <https://www.craftsy.com/post/how-to-draw-3d-shapes/>
12. <https://www.skillsyouneed.com/num/3d-shapes.html>
13. <https://mymodernmet.com/perspective-drawing/>
14. <https://youtu.be/8jvea0YWDK0>

SEMESTER – III
CORE COURSE THEORY & PRACTICAL
CHEMICAL PROCESSING OF TEXTILES

Course Code: 23UPTAD2C05

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:3:0

Course Duration : 75 Hours

Credit: 05

Course Description:

The course will practically guide the students to make the pattern blocks in industrial standards. Pattern Making Software is used by many garment designers to create elaborate computerized patterns, its grading and marker making which is the key requirement in the garment manufacturing unit. By the completion of this course students will be well skilled in customize the basic pattern into different size or styles and CAD software which enhances their career development.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Infer about pre-treatments and multitude processes involved in textile processing.	Cognitive
CO2	Formulate the several types of dyes & dyestuff and identify the different methods of dyeing with appropriate machineries.	
CO3	Generalize the working procedure of machineries and methods involved in textile printing.	
CO4	Classify the several types of textiles finishing and its applications in different fields.	
CO5	Distinguish the eco-friendly process involved in treatment of dye house effluent discharges.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H		M	H	H	H	H	H		M	
CO2	H		M	H	H	H	H	H		H	
CO3	H		M	H	H	H	H	H		H	
CO4	H		M	H	H	H	H	H		H	
CO5	H		H	H	M	H	H	H	M	H	L

Unit	Unit Title	Learning Chapters
I	Preparatory Process	<p>Pre-preparatory process – Objectives, Types - Stitching, Brushing and Grey check. Singeing: Objectives, Types - Plate, Roller and Gas singeing, merits and demerits. Desizing: Objectives, types - Rot steep, Acid steep and Enzymes steep, advantages and disadvantages. Scouring: Objectives, recipe, principle and scour loss. Bleaching: Objectives, Types - Sodium Hypochlorite, Hydrogen peroxide, Optical Brightening Agents (OBA). Mercerization: Objectives and principles - yarn and fabric mercerization - outline of pad-less chainless fabric mercerization. Degumming of silk.</p> <p>Core Skills: Treat grey cotton woven / knitted fabrics: Scouring, Desizing, Bleaching and Mercerizing.</p>

II	Dyes and dyeing machineries	Dye: Common terms, Classification of dyes and its properties, difference between dye and pigment. Dyeing of cotton fabric with direct, reactive, vat. Dyeing of wool and silk with acid and basic dyes. Dyeing of polyester and nylon using disperse dye. Dyeing machines and working Principles of Fibre dyeing - Hussang loose fibre dyeing machine. Yarn Dyeing - Hank Dyeing, Package dyeing machine. Fabric Dyeing - Jigger, Winch, Jet dyeing machine and garment dyeing machines. Natural Dyeing - Role of natural sources for Dyeing process. After treatment process for dyeing.
		<p>Core Skills:</p> <p>Dye the suitable fabric Samples using suitable dye stuff.</p> <ul style="list-style-type: none"> • Direct Dye, Disperse Dye, Reactive Dye, Acid Dye, Basic Dye and Vegetable Dye (any one)
III	Printing	Printing: Introduction to Printing. Preparation of printing paste, Comparison of dyeing and printing. Styles of printing - direct, discharge and resist styles of printing. Printing Machines: roller, flat bed screen, rotary- screen printing, and transfer printing machines. Garment printing machines. Modern Printing methods: Printing inks - digital printing- sublimation printing- 3D printing concept. Eco printing concept. After treatment process for Printing.
		<p>Core Skills:</p> <p>Print the Samples using Block printing, Stencil printing, Tie and Dye, Batik and Screen printing methods.</p>
IV	Finishing	Finishing: Introduction, objectives, Classification, and methods off finishing: Padding mangles, Heat setting, Coating. Aesthetic finishes: Sanforizing, Compacting, Calendering and Texture related finishes. Functional Finishes: Wrinkle free, Water repellent, Flame retardant and soil release finishes. Special Finishes: Insect repellent, Fragrance, Stone wash and Antibacterial finishes. Recent trends in finishing: Silicon, Resins, Enzymes and Nano-finish applications.
		<p>Core Skills:</p> <ul style="list-style-type: none"> • Identify the various finished articles or costumes in daily lives. • Recognize the natural agents for Eco-finishing.
V	Effluent Treatment	ETP – Objectives, Nature and effects, innovative solutions and its ranges. Types of Treatment processes - primary, secondary, and tertiary treatments. Osmosis and Reverse Osmosis water purification system. Government standards and outcomes for Effluent treatment plants. Eco-friendly textile processing – Dyes, finishes. Recycling and Organic fibres. Banned dyes: Azo and Amines, Reasons and Impacts. Eco labels - Government and Private labeling schemes.
		<p>Core Skills:</p> <p>Create any product using eco friendly or recycle manner.</p>

READING LISTS AND RESOURCES

Compulsory

1. Shenai V. A., Technology of Textile Processing – Vol. III, IV, V, VII and VIII, Sevak Publications, Mumbai, 1995
2. D G Dugg and S Sinclair, –Giles's Laboratory Course in Dyeing, Woodhead Publishing Limited (Fourth edition) December, 1989
3. Palmer John W., Textile Processing and Finishing Aids: Recent Advances, Mahajan Book Distributors, 1996
4. Ronald James W., Printing and Dyeing of Fabrics and Plastics, Mahajan Book Distributors, 1996
5. Textile Wastewater Treatment, 2016
6. Textile Finishing Basic Concepts and Application By D. Gopalakrishnan, 2018

7. Eco-Friendly Textile Dyeing and Finishing books Jam shed A Khan · 2016
8. Environmental Aspects of Textile Dyeing R M Christie · 2007
9. Textile Dyeing N. N. Mahapatra · 2019

Highly Recommended, not Compulsory

10. Textile Bleaching, Dyeing, Printing and Finishing Machinery By Archibald John Hall, 1926
11. Textile Dyeing Wastewaters Characterization and Treatment By Roderick H. Horning, 1978
12. Handbook of Textile and Industrial Dyeing Principles, Processes and Types of Dyes, 2011
13. Textile Processing with Enzymes, 2003
14. Sustainability in the Textile and Apparel Industries Subramanian Senthilkannan Muthu , Miguel Angel Gardetti, 2020
15. Water and Wastewater Examination Manual V. Dean Adams · 2017

Good for Students who have Future Interests

16. Handbook on Printing Technology (Offset, Flexo, Gravure, Screen, Digital, 3D Printing with Book Binding and CTP) 4th Revised Edition, 2019
17. Textiles, Identity, and Innovation: In Touch Proceedings of the 2nd International Textile Design Conference (D_TEX 2019), June 19-21, 2019, Lisbon, Portugal By Manuela Cristina Paulo Carvalho Figueiredo, 2020
18. L. W. C Wiles, –Textile Printing| (Merrow Monographs. Textile Technology Series)
19. The Chemistry of Synthetic Dyes V6: Reactive Dyes K Venkataraman · 2012
20. Printed Textile Design Amanda Briggs-Goode · 2013

SEMESTER – III
CORE COURSE PRACTICAL

PORTFOLIO – INDUSTRIAL ENGINEER REPORTS AND DOCUMENTATION IN APPAREL INDUSTRY

Course Code: 23UPTAD2L03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:0:4

Course Duration : 30 Hours

Credit: 02

Course Description:

Fashion Illustration is the specialty of conveying design thoughts in a visual structure that starts with representation, drawing and painting and furthermore known as Fashion portraying. It is principally utilized by style architects to conceptualize their thoughts on paper.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Recognize the welfare and safety concepts of operator and List out the operation sequences and machineries for various garment production.	Psychomotor
CO2	Examine the production procedures in garment production floor and calculate various cost sheets used in industry using the formula and functions in Spreadsheet.	
CO3	Examine the production flow procedures in garment production floor and develop various templates and reports.	
CO4	Evaluate quality parameters in the garment production floor for higher production.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	M	H	H	M	M	H	M	M	L
CO2			M	L	H	M	M	H	M	M	H
CO3		H	M	H	H	M	M	H	M	M	M
CO4		H	M	H	H	M	M	H	M	M	M

Unit	Unit Title	Learning Chapters
I	Production Arrangements	<ul style="list-style-type: none"> • Layout Designing – Types of line layouts & importance • Operator Training - Motivational & Personality Development • Operator welfare – Counseling, Motivation, Health and Safety Ergonomics • Production meeting – Pre and Post production
II	Pre - Production Activity and Documents	<ul style="list-style-type: none"> • SAM Calculation • Machinery Matrix and Skill Matrix • Work Station Planning – Line plan • Thread Consumption • Cost calculation –Batch Cost, Operation Cost & Employee salary/wages

III	Production Line Activity and Documents	<ul style="list-style-type: none"> • Time Study - Initial Stage & Moderate Stage • OCT Chart Preparation • Capacity Study • Method Study • Work Study • Production Plan – Hourly target & Monthly plan • TIMWOOD • ECRS – Eliminate, Combine, Rearrange and Simplify. • Plan Vs Actual Commitments
IV	High Productivity	<ul style="list-style-type: none"> • Line Balancing in Line plan • Production Efficiency • Special Machines – Purpose & Arrangements • Special Attachments – Purpose & Arrangements • Operator Soft Skills improvement

READING LISTS AND RESOURCES

Highly Recommended, not Compulsory

1. Management of Technology systems in Garment Industry, Gordana Colovic, Woodhead Publishing, New Delhi, 2011.
2. Apparel Manufacturing Technology T. Karthik, P. Ganesan, D. Gopalakrishnan, 2016
3. Process Selection from Design to Manufacture by K. G. Swift, J. D. Booker, 2000
4. Microsoft Excel Fundamentals Practical Workbook for Small Businesses By Rudy LeCorps, 2002.
5. Practical Numerical Analysis using Microsoft Excel By A. Nandy, 2003
6. Advance Excel 2016 Training Guide By Ritu Arora, 2018

Compulsory

7. Apparel International The Journal of the Clothing and Footwear Institute · Volume 28, 1997.
8. Advances in Apparel Production, Catherine Fairhurst, Woodhead publications, Cambridge, UK, 2008.
9. Management of Technology Systems in Garment Industry Gordana Colovic, 2011.
10. Straight to the Point : MS Excel 2003 by Firewall Media, 2005.
11. A Tutorial On Ms-Excel By V.B. Aggarwal, 2000

Good for Students who have Future Interests

12. Sourcing Practices in the Apparel Industry, Marlon Lezama, Brain Webbar, Charles Dagher, The Commonwealth Secretariate, UK, 2004.
13. Apparel Manufacturing IVth Edition, Ruth E Glock, Grace I Kunz, Kindersley Publications, New Delhi, 2005.
14. Garment Manufacturing – Processes, practices and Technologies, Prasantha Sarkar, Mudranik Technologies Pvt Ltd, New Delhi, 2015.
15. <https://www.emsisd.com/cms/lib/tx21000533/centricity/domain/71/practicalusesexcel.pdf>
16. <http://www.johnsjc.com/IT/Excel%20Practical-1.docx>
17. <https://www.wiseowl.co.uk/excel/exercises/standard/>
18. <https://www.youtube.com/watch?v=B7-h1Rb08CI>
19. <https://www.youtube.com/watch?v=fJbzc5pj3cM>

SEMESTER – III
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – III
SKILL ENHANCEMENT COURSE (ENTREPRENEURIAL SKILL)
ENTREPRENEURSHIP DEVELOPMENT

Course Code: 23UPTAD2S04

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:1

Course Duration : 30 Hours

Credit: 02

Course Description:

The course covers essential entrepreneurship concepts, including opportunity validation, market research methodologies, and customer satisfaction dynamics. Additionally, it delves into intellectual property rights, exploring patents, trademarks, brands, and copyrights to equip students with a comprehensive understanding of the business landscape.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Recognize entrepreneurship fundamentals, key skills, and growth-influencing factors.	Cognitive Level
CO2	Examine and validate business opportunities using tools like BCG Matrix, SWOT analysis, and innovation strategies while analyzing market and competitive dynamics.	
CO3	Distinguish market research methods, including data sources, surveys, statistical analysis, and competitor, market, and customer evaluations.	
CO4	Explore customer satisfaction factors, post-sale expectations, and the reasons for poor sales performance, including product design and market understanding.	
CO5	Discover about patents, trademarks, brands, and copyrights, including their meanings, legal frameworks, conditions, rights, and distinctions among these intellectual property types.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	H	L	H	H	H	H	M
CO2			L	H	H	L	H	H	H	H	M
CO3			L	H	H	L	H	H	H	H	M
CO4			L	H	H	H	H	H	H	H	M
CO5			L	H	H	H	H	H	H	H	M

Unit	Unit Title	Learning Chapters
I	Entrepreneurship	Entrepreneur – Definition, Characteristics, Entrepreneurship Career Option & Factors Affecting Entrepreneurial Growth – Economic, Non-Economic Factors. Entrepreneurial Competencies – Initiative, Opportunities, Persistence, Building Network Information, Concern for high quality of work, Commitment, Efficiency Orientation, Problem Solving, Assertiveness, Persuasion, skill set.

II	Business opportunity and ideation	Business Opportunity: Business Opportunity Identification process, Business Model, Validating Data, Selection Process, BCG Growth share Matrix. SWOT analysis. Building Innovation Circle. Identifying an Idea, Assessing the idea, Understanding Target segment, Sizing the Market, Analyzing the environment and Competitive advantage.
III	Market Research and Survey	Market Research: i) Primary Database, ii) Secondary Database. Census Survey: Concept, Merits and Demerits. Descriptive and Inferential Statistics. Market Survey: Potential Competitors Analysis, Potential Market Analysis, Customer Perception/Opinion, Level of Acceptance i) Price Determination ii) Acceptability Ecosystem, iii) Value Determination.
IV	Market Analysis	Customer Satisfaction: Post sale service expectation, Parameters of satisfaction, Cost of Customer Satisfaction, Encountering the reason for poor selling – Poor Product Design, Lack of Vision, Lack of Market Understanding, Poor Revenue Calculation, Poor Customer Understanding.
V	Patents, Trade Marks, Brand and Copyrights	Patents: Meaning and Law regarding Patent, why have Patents, what can be Patented, Conditions of Patent, Rights of Patentees. Trade Marks: Meaning, Definition, Registration of Trademarks, Brand: Meaning, Definitions, Distinction between Trademark and Brand, Essentials. Copyrights: Meaning and concept, Features of Copyright, Nature and scope of Copy right.

READING LISTS AND RESOURCES

Highly Recommended, not Compulsory

1. Start-up: A Practical Guide to Starting and Running a New Business, Tom Harris, Springer, 07-Aug2018
2. Innovation Markets and Competition Analysis EU Competition Law and US Antitrust Law By Marcus Glader, 2006

Compulsory

3. Business and Competitive Analysis Effective Application of New and Classic Methods By Craig S. Fleisher, Babette E. Bensoussan, 2007

Good for Students who have Future Interests

4. https://www.researchgate.net/publication/314540021_Business_Ethics_in_Apparel_Manufacturing_A_Literature_Review

SEMESTER – III

SKILL ENHANCEMENT COURSE

INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT

Course Code: 23UPTAD2I03

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 21 Hours/Week

Course Duration : 10-15 days

Credit: 04

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.

நான்காம் பருவம்

மொழிப்பாடம்

தமிழ் தொழிற்கல்வி IV

பாடக் குறியீட்டெண்: 23UPTAD2T04

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

இப்பாடநெறி மாணவர்களுக்கு தமிழர் ஆடை பற்றிய நூல் இன்மையை நீக்குதற்கும், இந்திய நாகரீகத்தின் அடிப்படையிலான ஆடை மற்றும் தமிழர் ஆடையைப் பற்றிய அறிவைப் பெறுதற்கும், ஆடை வணிகம் மற்றும் ஆடை தொடர்பான வேலை வாய்ப்புகளைப் பெறுவதற்கும் உதவுகிறது.

Course Learning Outcomes (CLOs)

இப்பாட நெறி முடிவுறும் போது மாணவர்கள்

S. No	Outcomes	Domains of Learning
CLO1	இந்திய நாகரீகத்தின் அடிப்படையிலான ஆடை வகையினை வகையறிந்து வேறுப்படுத்துவர்	Cognitive
CLO2	உடையின் தோற்றம், செயற்பாடுகள் மற்றும் இந்திய ஆடைகள் குறித்து தெளிவாக அடையாளம் காண்பர்.	
CLO3	காலம், சூழல், வழிபாடு, நம்பிக்கை போன்ற நிலையில் தமிழ் இலக்கியங்களில் ஆடையினைக் கையாளும் முறைகளை தீர்வு காணும் நிலையில் மதிப்பிடுவர். ஆடைத் தொழிலாளர் சமுதாய நிலை குறித்து தீர்வு காண்பர்	
CLO4	தமிழ் நாட்டு ஆடைகளில் வேட்டிவகைகளும் நிலைகளும் குறித்தப் பதிவுகளை விளக்குவர். ஆடை வணிகம் மற்றும் ஆடைத் தொடர்பான வேலை வாய்ப்புகளைக் குறித்து திட்டமிடுவர்.	
CLO5	தமிழகப் பழங்குடியினரின் ஆடைகள், பாரம்பரிய ஆபரணங்கள் கள ஆய்வு மூலம் பதிவுகளை அடையாளம் காண்பர்	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	L	M		L	M	L	
CO2			L	H	L	M		L	M	L	
CO3			L	H	L	M		L	M	L	
CO4			L	H	L	M		L	M	L	
CO5		L	L	H	L	M		L	M	L	

Unit	Unit Title	Learning Chapters
I	இந்திய நாகரீகத்தின் ஆடை வரலாறு	சிந்துவெளி நாகரீக ஆடை (கி.மு.3000) - வேதகால ஆடை (கி.மு.2500) - பௌத்தர் கால ஆடை (கி.மு.5 நூற்றாண்டு) - மௌரியர் கால ஆடை (கி.பி.300) - குப்தர், இராசபுத்திரர் கால ஆடை (கி.பி.320 முதல் 1300) - மொகலாயர் ஆடை (கி.பி. 12 -17 நூற்றாண்டு) - கேரளம் (பண்டையத் தமிழகம்).
II	இந்திய ஆடை வகைகள்	உடையின் தோற்றம் - செயற்பாடுகள் - இந்திய உடைகள் (அங்கார்க்கா, அணார்கலி ஆடை, குர்த்தா, குர்த்தி மேலாடை, கோவணம், சரைகி சல்வார், சல்வார், சல்வார் - கமீஸ், சாமா ஆடை, பஞ்சாபி காக்கரா, பஞ்சாபிக் குர்த்தாவும் தாம்பாவும், பருத்தி சேலை, பாட்டியாலா சல்வார், பாவாடை, புடவை, மஸ்ஸின் துணி, லுங்கி)
III	ஆடை பற்றிய ஆய்வு	ஆடை வகைகளின் தோற்றம் (பருத்தி, சணல், கம்பளி, பட்டு, சாயம் தோய்த்தல், ஆடை நெய்தல், கால வண்ணம்) - ஆடை பற்றிய நம்பிக்கை (வினை, கனவு, கற்பு, மந்திரம்) - தெய்வங்களுக்கு உடுத்தும் ஆடை (சிவபெருமான், திருமால், முருகன், விநாயகன், உமை) - ஆடைத்தொழில் (மூலப்பொருட்கள் சேகரித்தல், மூலப்பொருட்களைத் தயார்ப்படுத்தல், நூல் நூற்றல், பாவு, நெய்தல், மிளிர்ச்செய்தல், மணமூட்டல், தைத்தல் (தையற்கலை), வணிகம், வெளுத்தல்) ஆடைத் தொழிலாளர் சமுதாய நிலை (நூற்புத் தொழிலாளர், நெய்வோர், தூய்மை செய்வோர்) - தொழில்சார் உடைகள்

IV	வேட்டி	வேட்டி - வேட்டி உருவான விதம் - வேட்டியின் வகைகளும் அணியும் முறையும் - பிற மாநிலங்களில் வேட்டி - தமிழகத்தில் தற்போதுள்ள சூழலில் வேட்டியின் நிலை - ஆடை தொடர்பான தொழிற்சாலைகள் - ஆடைத்துறை தொடர்பான வேலை வாய்ப்புகள் - இன்றைய சூழலில் ஆடையின் பங்கு - உலகத்தமிழர் பேரமைப்பின் தமிழர் தேசிய உடைக்கான பரிந்துரை
V	ஆடை ஆய்வு	ஆடைத் தொழிலில் பசுமை உற்பத்தி - தமிழகப் பழங்குடியினரின் ஆடையினை ஆவணப்படுத்துதல் (கள ஆய்வு) - பாரம்பரிய ஆபரணங்கள் - நடன உடைகள் - தமிழ்த் திரைத்துறையில் ஆடையின் பங்கு - ஆடை வடிவமைப்பின் ஆய்வுக்களம்.

பார்வை நூல்கள்

1. பகவதி.கு, தமிழர் ஆடைகள்,உலகத் தமிழாராய்ச்சி நிறுவனம், சென்னை, 1980.
2. தட்சணாமூர்த்தி.அ, தமிழர் நாகரிகமும் பண்பாடும்,யாழ் வெளியீடு, சென்னை,2005.
3. வித்தியானந்தன்.சு, தமிழர் சால்பு, பாரி புத்தகப் பண்ணை, 1971.
4. மீராமுகைதீன் .அ, இலக்கிய ஆய்வுகள், உலகத் தமிழாராய்ச்சி நிறுவனம், சென்னை, 1974.

SEMESTER – IV
ENGLISH
PROFESSIONAL ENGLISH - IV

Course Code: 23UPTAD2P04

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

Students will be enabled to understand the basic objective of the course by being acquainted with specific dimensions of communication skills. Also, it helps them to apply techniques for developing inter-personal communication skills and positive attitude leading to their professional competence.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Learn words independently and use words correctly in a sentence	Psychomotor
CO2	Begin to transfer knowledge of structure into effective, concise and grammatically correct longer types of sentences	
CO3	Understand and use content area vocabulary	
CO4	Communicate fluently and sustain comprehension of an extended discourse	
CO5	To write any piece of writing that are simple, easy to read, and easy to follow	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	M	L	M	H	H	M	M
CO2				H	M	L	H	H	H	M	M
CO3				H	M	L	H	H	H	M	M
CO4				H	M	L	H	H	H	M	M
CO5				H	M	L	H	H	H	M	M

Unit	Unit Title	Learning Chapters
I	Vocabulary Development	a) Foreign words and phrases b) Homophones and homographs c) Tongue twisters
II	Basic Grammar	a) Spotting the errors(Subject- Verb Agreement) b) Degrees of comparison c) Active voice and passive voice
III	Reading skills	a) Reading comprehension b) Cloze Test c) Sentence construction and cohesion
IV	Conversational Skills	a) Attending an interview b) Apologising/Complaining / Making enquiries c) Giving directions and dialogue
V	Writing skills	a) Report Writing b) Curriculum Vitae c) Message writing

REFERENCES

TEXTBOOKS

1. TANSCHÉ, English for Arts and Social Sciences, Government of Tamil Nadu
2. Clenton, J., & Booth, P. (2020) Vocabulary and the Four Skills. Pedagogy, Practice, and Implications for Teaching Vocabulary.

REFERENCE BOOKS

3. Technical Communication- Principles and Practices by Meenakshi Raman and Sangeeta Sharma, Oxford Univ. Press, 2016, New Delhi.
4. A Course Book on Technical English by Lakshminarayanan, Scitech Publications (India) Pvt. Ltd.
5. Effective Communication Skill, Kulbhusan Kumar, RS Salaria, Khanna Publishing House.
6. Learning to communicate- Dr. V. Chellamal, Allied Publishing House, New Delhi, 2003.

JOURNALS AND DOCUMENTS

7. https://r.search.yahoo.com/_ylt=Awr1SUxD8IZkaVAQrDq7HAX.;_ylu=Y29sbwNzZzMEcG9zAzIEdnRpZAMEc2VjA3Ny/RV=2/RE=1686593731/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f342869636_Functional_English/RK=2/RS=D3f7twhwgoCzcUSKcXtxuZ6M1UI-
8. <https://www.bcu.ac.in/documents/examination/2020/2020%20and%202019/1st%20semester%20UG%20English%20textbook.pdf>

SEMESTER – IV
DISCIPLINE SPECIFIC ELECTIVE COURSE
INDUSTRIAL GARMENT COSTING

Course Code: 23UPTAD2E04

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:2:0

Course Duration : 60 Hours

Credit: 04

Course Description:

This course updates the students about the garment costing techniques available in the industry for charging the price estimation of the garment production in each and every operation like cutting, stitching, packing, shipping etc., also updates the students about the cost sheet preparation for different kinds of garments. As an entrepreneur they can use variety of pricing strategies in their Textile and Apparel business.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Generalize costing and its techniques for the various cost application methods.	Cognitive
CO2	Generalize cost sheet for various kinds of garment production and their uses.	
CO3	Analyze the Garment cost regarding the various Compositions and processes to manufacture the Garment.	
CO4	Categorize various pricing formula and pricing strategy levels in a garment export/import business.	
CO5	Formulate Standard allocate Minute using General Sewing Data for woven and knitted garments.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	H	M	H	H	M	M	
CO2			L	H	H	M	H	H	M	M	M
CO3			M	H	H	M	H	H	M	M	M
CO4			M	H	H	M	H	H	M	M	M
CO5			L	H	H	M	H	H	M	M	H

Unit	Unit Title	Learning Chapters
I	Introduction to Costing	Costing: Introduction, Definition and Principles. Terms associated with costing. Costing Techniques - Uniform costing, Marginal costing, Standard costing, Historical Costing, Direct costing and Absorption costing techniques. Classification of Costs - nature, functions, traceability, normality, time and process. Efficient Costing - Aims and Advantages.
II	Elements of Cost & Cost Sheet	Elements of Costing - Material, Labour and Expenses - Direct & Indirect costs. General Operating Expenses. Cost Sheet: Meaning of cost sheet, Contents of Cost Sheet, Uses of Cost Sheet, Types of Cost Sheet, and cost sheet preparation.
III	Cost of Garment and Cost Estimation	Composition of Cost of Garment: Fabric, Parameters that affect the Fabric Cost - UOM, MOQ and Incoterm used, Cost Calculation of Fabric in a garment - Fabric consumption for woven fabric and Knits. Calculation for trims, CMT, Value Added Service. Cost Estimation for Production: Cutting, Stitching, Packing, shipping, and Insurance.

IV	Pricing and Costing Strategies	Pricing Formula: Cost of Goods, Markup percentage, Wholesale and Retail differences. Price quote for garment export orders - Pre cost & Final costing. Price fixation methods - FOB, C&F, CIF, CM and CMT. Costing Strategies: Managerial Accounting, Direct Costing, Absorption Costing, Activity Based Costing. Costing Levels: Quick Costing, Costing for sale, Production costing, accounting formalities.
V	GSD & SAM Calculation	Standard Allocate Minutes - SAM calculation using General Sewing Data. SMV Calculation. Prepare Cost Sheet using SAM for Woven (Shirt and Trouser) and Knit (T-shirt and Track suits)

READING LISTS AND RESOURCES

Compulsory

1. A Textbook of Costing Principles, Norman spencer, East officer publisher,1986.
2. Costing for the Fashion Industry by Michael Jeffrey Nathalie Evans ,2011.
3. Cost Accounting byTulsian, Tata publisher McGraw-Hill Education, 2006.
4. Apparel Manufacturing Technology, By T. Karthik, P. Ganesan, Gopalakrishnan, CRC Press, 2016
5. Beyond Design: The Synergy of Apparel Product Development, Sandra Keiser , Myrna B.Garner A & C Black 6. Garment Manufacturing Technology edited byRajkishoreNayak, Rajiv Padhye

Highly Recommended, not Compulsory

7. Beyond Design: The Synergy of Apparel Product Development, Sandra Keiser , Myrna B.Garner A & C Black 8. Garment Manufacturing Technology edited byRajkishoreNayak, Rajiv Padhye
9. <https://www.businessmanagementideas.com/cost-accounting/costing-meaning-aims-and-methodscost-accounting/7265>
10. <https://www.toppr.com/guides/fundamentals-of-accounting/fundamentals-of-cost-accounting/elementsof-cost/>
11. <https://makersrow.com/search?q=cost+of+goods>

Good for Students who have Future Interests

12. <https://www.textileschool.com/181/garment-costing/>
13. <https://textilecalculation.blogspot.com/2014/11/calculation-of-garment-costing.html>
14. <https://www.textiletoday.com.bd/fashion-merchandising-garment-costing/>
15. <https://techpacker.com/blog/design/apparel-and-garment-costing/>
16. <https://apparelcareer.blogspot.com/2016/11/how-to-calculate-garment-costing-and.html>

SEMESTER – IV
SKILL ENHANCEMENT COURSE
DIGITAL DESIGN STUDIES PRACTICAL

Course Code: 23UPTAD2S05

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:0:2

Course Duration : 30 Hours

Credit: 02

Course Description:

Digital Design Studies is designed to edit two-dimensional images such as logos, posters etc., Digital Design graphics suites which include bitmap- images editor as well as other graphics related programs. This is a drawing program for windows in which we can create professional artwork like Logos, all types of cards, calendar, stationery, magazines, and books.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Execute the garments designs over 2 dimensional flat sketches using Digital design software tools.	Psychomotor
CO2	Perform various design studies in Digital design software.	
CO3	Develop logo, labels and printing designs in Digital design software.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			H		H	L	H	L	L	L	H
CO2			H	L	H	L	H	L	L	L	H
CO3			H	H	H	L	H	M	L	L	H

Unit	Unit Title	Learning Chapters
I	Create and Manipulate garment flat sketches	Coral draw models and applications. Working environment –Tool box, Menu bar, Property bar, Docker, Page layout, Status bar. Creating garment flat sketches using shaping options. Creating merchandising spec sheet using garment flat sketches. Manipulating flat sketches for style changes – Collar, Sleeve, Placket, Pocket, Hemline, Stitch line. Creating design for fashion silhouette suitable for apparel and fashion industry. Creating Duotone and Monochrome Images in digital.
II	Design Creation	Structural design - Create fabric swatches, Handkerchief designs. Decorative design creation, Embroidery designs and Creation of stencil designs. Drawing in perspective.
III	Logo creation and develop printing designs	Labels – Style label, Size label. Logo–Brand logo, Style logo. Monograms. Transfer sticker designing, Developing screen for spot, all over border designs. Digital Fashion Portfolio Boards creation. (Story Board, Colour and Mood Board, Inspiration and Flat sketches board).

READING LISTS AND RESOURCES

Compulsory

1. COREL DRAW TRAININGGUIDE By Satish Jain/M.Geetha, 2018
2. Inside CorelDRAW! The Practical Guide to Computer-aided Graphic Design By Daniel Gray, 1991
3. Straight to the Point :Corel DRAW 12 By Firewall Media, 2010
4. CorelDRAW X6 The Official Guide By Gary David Bouton, 2012
5. Fashion Artist Drawing Techniques to Portfolio Presentation By Sandra Burke, 2003

Highly Recommended, not Compulsory

6. Fashion Computing Design Techniques and Cade by Sandra Burke, 2006
7. The CorelDRAW Wow! Book By Linnea Dayton, Shane Hunt, Sharon Steuer, 1999

Good for Students who have Future Interests

8. https://www.coreldraw.com/static/cdgs/pdfs/dx4/CDTS_Case_Study_Lindex_EN_Letter.pdf
9. <https://www.coreldraw.com/en/pages/items/17700700.html>
10. <https://www.youtube.com/watch?v=fxjpHaBVEHM>

SEMESTER – IV
CORE COURSE PRACTICAL
GARMENT CONSTRUCTION (KID'S WEAR) PRACTICAL

Course Code: 23UPTAD2L04

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 2:0:3

Course Duration : 75 Hours

Credit: 04

Course Description:

The Course structured to provide practical skills in pattern development and construction for children's garments also this will help students to calculate the cost calculation and fabric requirement for the respective garments.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Design the various children's garments and formulate the measurements	Psychomotor
CO2	Develop the pattern blocks for different kinds of kids' garments and estimate the material calculation	
CO3	Construct the designed children's garments and calibrate cost calculation	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	H	H	H	M	H	M	M	M	H
CO2		H	H	H	H	M	H	M	M	M	H
CO3	H	H	H	H	H	H	H	H	H	M	

Unit	Unit Title	Learning Chapters
I	Garment Designing	Design a garment for New born: layette set. Toddler: Baba-suit, Frock varies School Age: Pinafore, Uniform Shirt and Trousers.
II	Pattern Making	Drafting the patterns for Layette set, Baba-suit, Frock varies, Pinafore, Uniform Shirt and Trousers.
III	Garment Construction	Construct Layette set, Baba-suit, Frock varies, Pinafore, Uniform Shirt and Trousers.

Laboratory Equipments:

Drafting Tools, Single Needle Lock Stitch Machine, Over Lock Machine & Ironing Equipments.

READING LISTS AND RESOURCES

Compulsory

1. Garment Construction A Complete Course on Making Clothing for Fit and Fashion By Peg Couch, 2011
2. The Complete Book of Sewing By Chris Jeffreys, DK Publishing, Inc, 2003
3. The New Complete Guide to Sewing Step-by-Step Techniques for Making Clothes and Home Accessories Updated Edition with All-New Projects and Simplicity Patterns By Editors of Reader's Digest, 2010
4. The Dressmaker's Companion A Practical Guide to Sewing Clothes By Elizabeth M. Haywood
5. The Dressmaker A Complete Book on All Matters Connected with Sewing and Dressmaking from the Simplest Stitches to the Cutting, Making Altering, Mending and Caring for the Clothes By Butterick Publishing Company, 1916.
6. Illustrated Guide to Sewing: Garment Construction A Complete Course on Making Clothing for Fit and Fashion By Fox Chapel Publishing, Colleen Dorsey, 2011
7. Practical Pattern Making By Lucia Mors, Lucia Mors de Castro, Isabel Sánchez Hernández, 2015
8. Patternmaking For Fashion Design And DVD Package, 4/E (DVD) By Helen Joseph, 2008
9. Metric Pattern Cutting for Children's Wear and Baby wear By Winifred Aldrich, 2009

Highly Recommended, not Compulsory

10. Pattern Making for Kids' Clothes All You Need to Know about Designing, Adapting, and Customizing Sewing Patterns for Children's Clothing By Carla Hegeman Crim, 2014
11. Oliver + S Little Things to Sew 20 Classic Accessories and Toys for Children By Liesl Gibson, Liesl and Company, Inc., 2011
12. Children's costume in America, 1607-1910 1980
13. Fashion Patternmaking Techniques for Children Dresses, Shirts, Bodysuits, Trousers, Jackets and Coats By Antonio Donnanno , 2018

Good for Students who have Future Interests

14. Laser Cutting for Fashion and Textiles By Laura Berens Baker , 2016
15. <http://www.madehow.com/Volume-4/Children-s-Clothing.html>
16. <https://sewguide.com/sewing-for-children/>
17. <https://www.thesprucecrafts.com/techniques-for-sewing-clothing-2978471>
18. <https://www.garnethill.com/kids-size-charts/content>
19. <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=121322>
20. <https://www.muellerundsohn.com/en/allgemein/pattern-construction-for-baby-basics/>

SEMESTER – IV
QUALIFICATION PACK – II (LEVEL 5)
INDUSTRIAL ENGINEER (AMH_Q2001_v2.0)

Course Code: 23UPTAD2Q02

Marks: 100 Marks (Assessment by NSDC)

L:T:P – 2:3:2

Course Duration : 105 Hours

Credit: 06

Course Description:

An Industrial Engineer is responsible for determining most effective ways to create a product or service in sewing line. Their work includes analysis of the sewing method & process, machine and supervision of production floor for efficiency improvement. Monitor factory performance in terms of quality, delivery, cost-efficiency, and target improvements with the internal factory team and taking necessary corrective action.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Selection of fabrics, trims and accessories based on attributes suitable for the product class to be developed.	Psychomotor & Cognitive
CO2	Supervise all activities performed by operators and evaluate their performance. Analyse and evaluate performance on production floor	
CO3	Identify & troubleshoot the production problem for better production system	
CO4	Documentation and management of data Record Keeping	
CO5	Hazards and potential risks associated with the process, guidelines for medical emergencies and evacuation process & sensitization of Gender & PwD concerns.	
CO6	Observe organizational norms and follow green procedures at workplace.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H	H	H	H	H	H	H	H	H	M	L
CO2		H	M	H	H	L	M	H	H	M	L
CO3	M	H	L	H	H	L	M	H	M	M	L
CO4		H	L	H	H	M	M	H	M	M	L
CO5		H	M	H	H	H	M	H	M	M	L
CO6	M	M	L	H	H	M	M	H	M	M	L

Unit	Learning Chapters (http://sscammh.com/approvedQPNo.php)
I	Reference ID: AMH/N2001: Select fabrics trims and accessories as per specific product category
II	Reference ID: AMH/N2002: Supervise, Analyze and Evaluate Performance on Sewing Floor
III	Reference ID: AMH/N2003: Research and Resolve production problems to implement better production system
IV	Reference ID: AMH/N2004: Manage data, forms and instructions for recording, evaluating and reporting quality and reliability data
V	Reference ID: AMH/N1605: Maintaining a healthy, safe and secure working environment in the organization with Gender and PwD Sensitization
VI	Reference ID: AMH/N0104: Comply with industry, regulatory and organizational requirements and Greening of Job roles

READING LISTS AND RESOURCES

1. Strategic Supply Management: Principles, Theories and Practice by Paul Cousins, Richard Lamming, Published February 1st 2008 by Prentice Hall
2. Operations Management by Jay Heizer, Barry Render Published February 1st 2003 by Pearson (first published August 26th 1998) ISBN0131209744 (ISBN13: 9780131209749)
3. Designing And Managing The Supply Chain by David Simchi-Levi Published November 1st 2002 by McGraw-Hill Higher Education (first published 1999)
4. Original Title Designing and Managing the Supply Chain ISBN 0071214046 (ISBN13: 9780071214049)
5. Production Ergonomics by Cecilia Berlin, Caroline Adams - Ubiquity Press Ltd. , 2017
6. <http://sscammh.com/approvedQPNo.php>
7. Manufacturing Processes and Materials: Exercises by Miltiadis A. Boboulos – Book Boon , 2010
8. https://sscammh.com/admin/app/webroot/files/ptno/qpno1652196407AMH_Q2001_v2.0-Industrial-Engineer.pdf

SEMESTER – IV
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M04

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – IV

SKILL ENHANCEMENT COURSE

INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT

Course Code: 23UPTAD2I04

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 21 Hours/Week

Course Duration : 25-30 days

Credit: 04

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.

SEMESTER – IV
VALUE EDUCATION THEORY & PRACTICAL
ENVIRONMENTAL STUDIES

Course Code: 23UPTAD2V01

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 0:2:0

Course Duration : 30 Hours

Credit: 02

Course Description:

It discusses about the Natural Resources and equitable use of resources for sustainable lifestyles. It deals with the structure and functions of an eco system. Its further reviews about environmental pollution and waste management techniques.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Express public awareness about environmental resources and an individual responsibility towards environment.	Cognitive
CO2	Infer about natural and equitable resources for sustainable lifestyles.	
CO3	Distinguish structure, function, and Energy flow in the ecosystem environment.	
CO4	Categorize environmental pollutions and its hazardous impacts and ways to control it.	
CO5	Generalize waste management and environmental ethics.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	M	H	H	M	L	H	
CO2			M	H	M	H	H	M	L	H	
CO3			L	H	M	H	H	H	L	H	
CO4			L	H	M	H	H	H	L	H	
CO5			M	H	M	H	H	H	L	H	

Unit	Unit Title	Learning Chapters
I	Environmental Resources and its Utilization	Definition - Environmental Studies, Natural Resources, Renewable, and non-renewable resources, Sustainable Utilization or Development Reuse, Recycle, Reduce. Methods for prevent waste, Equitable use of resources for sustainable life styles. Activity: Take any article(e.g) Clothes, food etc., and answer 1. Predict the components and its origin. 2. List the renewable and non-renewable resources in the article. 3. How could you re-use, recycle, and reduce the article? 4. How it is used unsustainably? 5. How to prevent Waste, can you reuse article that you throw away, what recycled material can you make? 6. Think of the various energy sources you use every day. How could you reduce their use?
II	Natural Resources and its Utilization	Multidisciplinary values of nature – Productive value of nature, Aesthetic/Recreational value of nature, and the option values of nature. Detailed Classification of Natural resources – Non-renewable: Minerals, Fossil fuels; Renewable: Forest, Water, Mineral, Food, Energy, and Land.

		<p>Activity: Take a cotton T-shirt and</p> <ol style="list-style-type: none"> 1. Identify the raw materials, What waste it generates and how it is disposed? 2. What pollution it creates? Role of individuals in conservation of natural resources. <p>Equitable resources for sustainable life styles.</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. How much water is needed for one person? 2. Estimate your average daily consumption.
III	Ecosystems	<p>Concept of an ecosystem - structure and function of an ecosystem. Producers, consumers, and decomposers. Energy flow in the ecosystem - Definition, Illustrate self explanatory figure of Water cycle, Carbon cycle, Nitrogen cycle, Oxygen cycle, and Energy cycle. Illustrate self explanatory figure of Food chains, food webs, and ecological pyramids - Terrestrial food pyramids and Aquatic food pyramids. Ecosystem - Definition, Types, Uses and threats of Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</p>
IV	Environmental Pollution	<p>Air pollution - Definition, Types of particulates, Ozone depletion - Draw and showing the balanced and unbalanced atmospheric conditions of Green house effect. Water pollution - Definition, Ground water pollution, Control measures. Soil pollution - Definition, Soil degradation, Excess use of Pesticide, water and Salts. Marine pollution - Definition, Causes, effects, and control measures. Noise pollution - Definition, Decibel levels of common sounds, Effects of noise pollution on physical health, Effects of noise pollution on mental health, Permitted noise levels, Noise Control techniques. Thermal pollution & Nuclear hazards - Definition, Effects and Control measures.</p>
V	Waste Management and Social issues & Environmental	<p>Urban/Municipal solid waste - Managing waste, Control measures - Source reduction, Recycling, Disposal- Incineration, Steps for Vermi - Composting. Hazardous waste - Characteristics, Environmental problems and health risks caused by hazardous wastes. Role of an individual in prevention of pollution. Social issues and environment - Needs, strategies used, From unsustainable to sustainable.</p>
		<p>Environmental Ethics - Equity, The need for Gender Equity, Preserving resources for future generations, The ethical basis of environment education and awareness, The conservation ethic and traditional value systems of India. Consumerism and Waste Products.</p> <p>Case studies:</p> <ol style="list-style-type: none"> 1. Pani Panjayat Moment, 2. Mewar Region of Rajasthan, 3. Chipko Moment, 4. The Gandhian way of Life and 5. The Shanthinikethan Model.

READING LISTS AND RESOURCES

Compulsory

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
3. Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
4. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, JaicoPubl. House, Mumabai, 1196p

Highly Recommended, not Compulsory

5. De A.K., Environmental Chemistry, Wiley Eastern Ltd
6. Down to Earth, Centre for Science and Environment (R)
7. Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p
8. Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
9. Heywood, V.H & Waston, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p
10. Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.

Good for Students who have Future Interests

11. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB)
12. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
13. Rao M N. & Datta, A.K. 1987. Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p
14. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut

SEMESTER - V
CORE COURSE THEORY
SUSTAINABLE APPAREL PRODUCTION

Course Code: 23UPTAD2C06

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:3:0

Course Duration : 75 Hours

Credit: 05

Course Description:

This course expedites the students to gain knowledge towards the Sustainable measures, processes and certification in the textiles and apparel industries. Updated facts towards this make the students to explore more in these industries.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Summarize the concepts of environmental and social sustainability and its impacts over Textile sector. Generalize consumer behavior and influence in sustainable living.	Cognitive
CO2	Explain Carbon foot prints of different fibres, its causes and methods to reduce Carbon foot prints in sustainable apparel production.	
CO3	Describe sustainable materials, various sustainable design strategies, and its challenges in implementing apparel production.	
CO4	Outline the solutions for sustainable process, sourcing and production	
CO5	Interpret sustainable standards and certificates for textile sector.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M		H	H	H	H	H	H	H	H	
CO2	H		H	H	H	H	H	H	H	H	
CO3	H		H	H	H	H	H	H	H	H	
CO4	H		H	H	H	H	H	H	H	H	
CO5	H		H	H	H	H	H	H	H	H	

Unit	Unit Title	Learning Chapters
I	Sustainability	Definition, Types & Pillars of sustainability, Purpose of sustainability, Primary Goals of Sustainability. Sustainable system: Environmental, Economic and Social sustainability. Textiles, Clothing and Green supply chain management (GSCM). Product - Life cycle assessment (LCA). Role & requirement of sustainability manager / in charge - Consumer behaviour in sustainable living The Consumer Behaviour Influence –Attitude, Knowledge and Behaviour Gap – Three theories behaviour – Forms of Sustainable Consumption Behaviour– Impacts of sustainability over industries – positive & Negative Impacts.
II	Sustainable Designs for Apparel	What is Green House Gas? List the Types and Sources of Greenhouse gas. Define Global warming potential and Carbon footprint. Global Carbon Footprint and its effects, Carbon footprint of various textile processes, Carbon footprint of natural fibres and their products: Carbon footprint of Cotton fibre products, Carbon footprint of white long shirt, Carbon footprint of wool, jute, linen. Carbon footprint of Synthetic fibres and their products: Regenerated fibres and PP shopping bags. Methods to reduce carbon footprint - 3R's Reuse / Reduce / Recycle.

III	Sustainable Designs for Apparel	Sustainable Materials: Smart materials (e.g.) Pinnatex, Biodegradable, reuse, Organic, Recycled /Upcycled/down cycled, Deadstock, Compare different eco-friendly materials. Design for waste minimization/ Zero waste, Design for disassembly (DfD), Design for Slower Consumption/Longevity, Design for Social Well-being, Design for User Participation (Co-Design), Design for Product/Service System (PSS), Design for End-of-Life (EoL) Strategies, Challenges in implementing sustainable design strategies, Essential design aspects for expanding clothing life spans and Existing Sustainable Design Practices in the Fashion Industry: Case Studies.
IV	Sustainable Processes, Sourcing and Production	Sustainable Processes: Waterless dyeing, 3D printing, Natural Dyeing, Printing (ink types). Advantages of Spin-dyeing compared to conventional dyeing, Sustainable coloration like Enzymatic synthesis and plasma pre-treatment. Sustainable Sourcing: Criteria for evaluating and selecting sustainable suppliers. Sustainable Production: Adopting Resource efficiency and Cleaner Production strategy in apparel manufacturing: Dematerializing products, Increasing process efficiency (Reducing operational cost and process waste through lean manufacturing),minimizing process emissions (Minimizing Air pollution) switching to low carbon inputs (Use of Renewable energy and energy saving) Closing the carbon loop (Recycling hard waste) Recyclability: Recycling possibilities for End of life products (EOL)
V	Sustainable Standards and Certification	Social sustainable practices in Apparel industry: Aspects of 1) Labor practices and decent work,2) Human rights, 3) Society, 4) Product responsibility in Apparel industry. Sustainable Standards and Certification Holistic: Remake, Eco stylist, B. Corporation, Sustainable Apparel Coalition, The Higg Index. Fibre Standards: Global Organic Textiles Standard (GOTS), Fair trade Certified Cotton, Better Cotton Initiative (BCI), Cotton Made in Africa (CMiA), Global Recycle Standard, Organic Content Standard, and Responsible Wool Standard Chemical Control: Oeko-Tex 100. Bluesign Labor rights and working conditions: SA8000 Standard, Fair trade Textile Standard, WRAP, Ethical Trading Initiative, The Social Accountability Accreditation Services (SAAS), Fair Wear Foundation Circular Standards: Cradle to Cradle Fair Trade: Fair trade Certified Textiles, Fair trade Certified Cotton, Fair Trade USA, World Fair Trade Organization (WFTO) Guarantee System. Vegan: PETA Approved Vegan.

READING LISTS AND RESOURCES

Compulsory

1. A Textbook of Costing Principles, Norman spencer, East officer publisher,1986.
2. Costing for the Fashion Industry by Michael Jeffrey Nathalie Evans ,2011.
3. Cost Accounting byTulsian, Tata publisher McGraw-Hill Education, 2006.
4. Apparel Manufacturing Technology, By T. Karthik, P. Ganesan, Gopalakrishnan, CRC Press, 2016
5. Beyond Design: The Synergy of Apparel Product Development, Sandra Keiser , Myrna B.Garner A & C Black 6. Garment Manufacturing Technology edited byRajkishoreNayak, Rajiv Padhye

Highly Recommended, not Compulsory

7. Beyond Design: The Synergy of Apparel Product Development, Sandra Keiser , Myrna B.Garner A & C Black 8. Garment Manufacturing Technology edited byRajkishoreNayak, Rajiv Padhye
- 9.<https://www.businessmanagementideas.com/cost-accounting/costing-meaning-aims-and-methodscost->
- 10.<https://www.toppr.com/guides/fundamentals-of-accounting/fundamentals-of-cost-accounting/elementsof-cost/>
11. <https://makersrow.com/search?q=cost+of+goods>

Good for Students who have Future Interests

12. <https://www.textileschool.com/181/garment-costing/>
13. <https://textilecalculation.blogspot.com/2014/11/calculation-of-garment-costing.html>
14. <https://www.textiletoday.com.bd/fashion-merchandising-garment-costing/>
15. <https://techpacker.com/blog/design/apparel-and-garment-costing/>

SEMESTER – V
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
APPAREL MERCHANDISING

Course Code: 23UPTAD2E05

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course offers a comprehensive overview of the apparel export merchandising process, focusing on buyer interaction, sample development, and production management. Students will learn essential skills in sourcing, costing, quality control, and export documentation. By the end of the course, they will be equipped to manage the supply chain efficiently, ensuring successful product delivery and adherence to global standards.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Predict key merchandising concepts, processes, and the roles of various stakeholders in the apparel export industry.	Cognitive
CO2	Acquire skills in buyer requirement analysis, sample development, costing, and sourcing of materials for apparel production.	
CO3	Develop proficiency in coordinating sample development, ensuring sample approvals, and managing communication between internal teams and buyers.	
CO4	Learn to manage pre-production meetings, monitor production progress, ensure quality control, and coordinate logistics and certifications.	
CO5	Device compliance, export documentation, quality audits, final inspections, and the invoicing and payment processes in post-production stages.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	H	L	M	M	L	L	L
CO2	M	M	M	H	H	L	M	M	L	L	L
CO3	M	H	M	H	H	L	H	H	L	L	M
CO4		M	L	H	H	L	H	H	L	L	M
CO5			L	H	H	L	H	H	L	L	H

Unit	Unit Title	Learning Chapters
I	Introduction to Apparel Export Merchandising	Terminologies of merchandising: merchandise, merchandiser, merchandising, export, exporter, importer, buying house, export house, satellite office, customer or end buyer, third party buyer or trading house, consumer, contractor, sub-contractor, supplier, whole seller, retailer, manufacturer, trader, woven garments industry, knit garments industry, full fashion garments industry, Seasonal type garments – Country wise, Traditional type (Trend changes every five years), Direct order, merchant export, buyer, designer, line, collection and CMT., Buying house - Types of buying house, working process of buying house, Export house -Departments in Export house Process sequence of export house, responsibilities of merchandiser, skills required for merchandiser.

II	Merchandiser Role during Preproduction	<p>Order Acquisition and Negotiation: Understanding buyer's requirements (Tech pack, Quantity, Quality, delivery schedule) Sample development, Sample development approval, Costing and budgeting (Cost analysis, quotation preparation, negotiation strategies), Sourcing and Procurement (Find reliable suppliers for materials, trims, and accessories, negotiate prices and manage purchasing contracts, Quality of raw materials, In-house approval for all kinds of accessories, Decision making approval process for fabric, colour, print, embroidery and packing), Production planning (Line plan, Time and Action Plan procedures), Technical File Preparation (Create a comprehensive document with all product specifications, materials, trims, construction details, and quality standards.)</p>
III	Merchandiser's role in Sample development approval	<p>Coordination with internal departments, coordination between a merchandiser and a buyer in the sample approval process, types of samples, purposes and procedures: Early development sample – Mockup, Proto sample/ development sample, Digital garment sample. Fit and size: Fit sample, Size set sample. Marketing and production: Salesman sample (SMS), Photo sample, Pre-production and final verification: Pre-production sample (PPS), Top of production (TOP) sample, Duplicate sample, Shipment sample, Material & Design Approval: Fabric swatch or Lab dip, Embellishment or embroidery sample, Wash test sample, strike off or Print sample, Lab test sample, Marketing sample. Purpose of pilot sample and its requirements. Execution for all sample comments during the production process.</p>
IV	Merchandisers role in Production Management	<p>Pre-production Meeting: Conduct meetings with all internal departments (production, quality, logistics) to discuss the order, timelines, and quality expectations., Production Monitoring: Regularly follow up with factories, track production progress, address any issues or delays, and ensure adherence to quality standards. Quality Control: Organise inspections at various production stages, work with quality control teams to identify and rectify any defects. Testing and Certification: Ensure garments meet required safety and compliance standards, arrange for necessary certifications. Logistics and Transportation: Coordinate with shipping companies, Ensure smooth delivery to the buyer. Significance of distribution centres, Warehouse Management system, Transportation Management system, GPS and CRM systems. SCM in a Global economy, SCM implications for fashion retailers.</p>
V	Merchandisers role in Post-production	<p>Compliance and Documentation: Understanding and implementing buyer standards: Export licence, Prepare export documentation. Ensuring adherence to specific quality, safety and social compliance requirements. Internal audits: Conducting regular audits to identify and address potential issues before external inspections. QA and Statutory audits: Facilitating smooth external audits by maintaining comprehensive documentation and records. Final Inspection and Shipment: Conduct final quantity and quality checks before shipment and inspection certificate, Packing list. Certificate of origin, Bill of lading, Bill of exchange, Shipping bill.</p>

		<p>Invoicing and Payments: Prepare invoices based on agreed-upon terms, follow up with buyers for timely payments, Commercial invoice, Performa invoice, Letter of credits and its types, Order Reconciliation and Analysis: Analyse order profitability, identify areas for improvement, and report findings to management.</p>
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READING LISTS AND RESOURCES

Compulsory

1. Apparel Export | Flow Chart of Garments Export Process - Garments Merchandising
2. Fashion Logistics, Insights Into the Fashion Retail Supply Chain By John Fernie, David B. Grant - 2019
3. Fashion Supply Chain Management By Michael Londrigan, Jacqueline M. Jenkins -2018
4. Glock, R.E., & Kunz, G.I. (2004). Apparel Manufacturing: Sewn Product Analysis. Pearson Prentice Hall.

Highly recommended, not compulsory

5. Jones, R.M. (2006). The Apparel Industry. Blackwell Publishing.
6. Burns, L.D., Mullet, K.K., & Bryant, N.O. (2011). The Business of Fashion: Designing, Manufacturing, and Marketing. Fairchild Books.
7. Tyler, D. (2008). Carr and Latham's Technology of Clothing Manufacture. Wiley-Blackwell.
8. Jackson, T., & Shaw, D. (2006). The Fashion Handbook. Routledge.

Good for Students who have Future Interests - WebPages

9. Keiser, S.J., & Garner, M.B. (2012). Beyond Design: The Synergy of Apparel Product Development. Fairchild Books.
10. Abernathy, F.H., Volpe, A., & Weil, D. (2006). The Future of the Apparel and Textile Industries: Prospects and Choices for Public and Private Actors. Harvard Center for Textile and Apparel Research.

SEMESTER – V
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
CARE AND MAINTENANCE OF TEXTILES – I

Course Code: 23UPTAD2E06

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course is designed to provide a comprehensive exploration of the principles and practices involved in the care and maintenance of textiles. Through a combination of theoretical insights and hands-on applications, this course aims to equip students with the knowledge and skills necessary for effective textile care, emphasizing the intersection of consumer needs, environmental considerations, and textile science.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Predict textile material cleaning, including by machine, hand, and with chemicals, exploring their benefits and limitations.	Cognitive
CO2	Devise household washing machines and functioning of hydro extractors.	
CO3	Identify stains and specific chemicals and procedures for removing various stains as well as exploring dry cleaning methods.	
CO4	Explore the requirements and regulations for care labeling, and delves into various process descriptions indicated by care labels.	
CO5	Manage specialty textile items and explores the green cleaning concept both wet and dry cleaning methods.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H			H	M	M	L	M	L	L	
CO2	M			H	M	M	L	M	L	L	
CO3	H			H	H	M	L	M	L	L	
CO4	H			H	M	M	L	M	L	L	
CO5	H			H	H	M	L	M	L	L	

Unit	Unit Title	Learning Chapters
I	Cleaning of Textile Materials	Cleaning of Textile Materials – Wet Cleaning – by machine, by hand, using chemicals and other washing aids. Benefits and Limitations of Dry Cleaning – Solvents and other chemicals used – Benefits and Limitations. Precautions during Dry Cleaning.
II	Laundry Equipments	Laundry equipment - Classification – household washing machines. Factors to consider when purchasing a washing machine. Parts and functions of electric iron. Two types of steam iron. Functioning of hydro extractors.
III	Stain Removal and Dry Cleaning	Stain – Classification of stains- identification. rules for stain removal. The chemicals and procedure to remove the following stains (fresh and dry) from white cotton fabric (tea, coffee, blood, egg, fruit and wine, oil, iodine,) (candle wax, iron rust, lipstick, urine, paint) Dry cleaning. Grease absorbents & Grease solvents.

IV	Care Labeling	Care Labeling – Definition, Terminologies used in Care Labeling. Requirements and Regulations for Care Labeling. Various process description by care labels – Laundering, Bleaching, Dry cleaning, Tumble Drying, Ironing or Pressing. Electronic care labels.
V	Environmental impacts of cleaning	Care Instructions for specialty textile items – Carpets and rugs, bed linens, blinds, shutters and awnings, blankets, leathers. Problems during laundering and dry cleaning with solutions. Green cleaning concept – Ozone laundering, Ultrasonic cleaning, Eco-friendly chemicals for wet and dry cleaning.

READING LISTS AND RESOURCES

Compulsory

1. Care and Maintenance of Textile Products Including Apparel and Protective Clothing By Rajkishore Nayak, Saminathan Ratnapandian, CRC Press, 2018
2. "Textiles: Concepts and Principles" by Virginia Hencken Elsasser Year: 2016 Publisher: Fairchild Books
3. "Laundry: The Home Comforts Book of Caring for Clothes and Linens" by Cheryl Mendelson, Year: 2009, Publisher: Scribner
4. "A Consumer's Guide to Textile Cleaning" by Susan Rachman Year: 1993, Publisher: Butterworth-Heinemann
5. Susheela Danttyagi- Fundamentals of Textiles and their Care – Orient Longman- Hyderabad.
6. Bernard P Corbman – Textiles – Fiber to fabric- McGraw Hill Book company – New Delhi

Highly recommended, not compulsory

7. "Chemistry and Technology of Fabric Preparation and Finishing" by Charles Tomasino Year: 2014, Publisher: CRC Press
8. "Journal of Textile Science & Engineering"
9. DurgaDeulkar- Household Textiles and Laundry Work – Atma Ram and Sons- Delhi.
10. Noemia DSouza- Fabric Care- New Age International Limited, publishers, Hyderabad.
11. S R Karmakar – Chemical Technology in the pretreatment processes of textiles – Elsevier – New York.

Good for Students who have Future Interests - WebPages

12. American Cleaning Institute
13. Textile Exchange
14. Laundry and Home Care – Henkel
15. American Cleaning Institute - Cleaning101
16. <https://www.studiestoday.com/node/236713/viewfile.html>
17. Textile committee – Best Management Practices for pollution prevention in the textile industry.

SEMESTER – V
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
HOME TEXTILES – I

Course Code: 23UPTAD2E07

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course focuses specifically on key elements of home textiles, Students will gain in-depth knowledge of selecting, caring for, and integrating these textiles to enhance residential spaces. The curriculum delves into fabric characteristics, design considerations, and sustainable choices for each category. Practical insights on maintenance and aesthetic integration will be emphasized, preparing students for roles involving bed linens, floor coverings, and door/window treatments in interior design or related fields.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Predict the home furnishing industry in India and the usage of furnishings in different workplaces.	Cognitive
CO2	Insights the classification of home textiles, and the use of various furnishings fibres for different interior applications.	
CO3	Identify different soft floor coverings and its maintenance practices.	
CO4	Explore the components of doorways and windows, and providing insights into curtains and draperies.	
CO5	Delve various aspects of bed linens and their care; it further explores different types of bedspreads and mattress construction.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		L	H	H	H	H	H	M	L	L	
CO2	H	M	H	H	H	H	H	M	L	L	
CO3	M		H	H	H	H	H	M	L	L	
CO4	L	M	H	H	H	H	H	M	L	L	
CO5	M	L	H	H	H	H	H	M	L	L	

Unit	Unit Title	Learning Chapters
I	Home Textiles	Home Textiles – Definition, History of home textiles. Home Furnishing Industries in India - market structure and its future. Home textile production in India. Home textile industry and its further prospects. Factors influencing in the selection of home furnishings for different interiors. Usage of furnishing for different workplaces.
II	Interior Furnishing and Lighting	Classification of home textiles - Bed linens, Kitchen linens, Table linens, Bathroom linens, Floors and floor coverings. Furnishings used for different interiors - Cotton fabrics, Wool fabrics, Man-made fabrics, Aniline leather, Protected or pigmented leather.
III	Floor Coverings	Floor coverings - Soft floor coverings – Carpet – Construction methods - tufting, weaving, needle punching, flocking, and knitting, Rugs – Types, Specialty of rugs from different sources. Maintenance of carpets and rugs - Removing spots and stains.

IV	Window Door Treatments	Door - Doorway components. Window - Parts of a window, Different types of windows, Hardware used in windows. Door and Window treatments fabric types. Curtains and draperies - Curtain terms, Curtains and their various types, Hardware used for curtain and drapery, Measuring up for curtains – Various Head and Pleat styles.
V	Bed Linens	Bed linens, Pillow covers, Duvets, Duvet cover, Bed sheets - Types of bed sheets, Choosing the right bed sheets, Care and maintenance. Shams, Comforters - Bed comforters, Types of bed comforters. Bed skirts. Blankets - Types of blankets. Bedspreads - Types of bedspreads. Mattress - Mattress construction and types.

READING LISTS AND RESOURCES

Compulsory

1. Home Furnishing By [V. Ramesh Babu](#), [S. Sundaresan WPI India](#) 2018
2. Home Furnishing Industry in India, By [Chillibreeze](#) Chillibreeze Publications, 2008.
3. Donserkery K. G., (1973) Interior Decoration in India, D. B. Taraporevala Sons and Co. Pvt Ltd., Mumbai.
4. Indian Textile Journal (Monthly Magazine), S. Joseph (Chief Editor), IPF online Ltd., Chennai.
5. Bruce N. Wright, Innovative Interior Textiles, AIA Vol 6; Issue 10, 2005.
6. Susan M. Winchip. Professional practice for Interior designers in the global market place, ISBN: 9781609011383, Fairchild Books, 2012.
7. Alexander N. G., (1972) Designing Interior Environment, Mas Court Brace Covanorich, New York.

Highly recommended, not compulsory

1. Colourage (Monthly Magazine), R. V. Raghavan (Editor), Colour Publications Pvt.Ltd., Mumbai Inside Outside (Monthly Magazine), Business India Publications.
2. Schwamborn: G. Grass, (2009) Hard floor cleaning.
3. Kleinschmidt, J. (2008, September). The ins and outs of fabric, Specialty Fabrics Review, 34.
4. Waier, Phillip R. (1993) Means Building Construction Cost Data. 51st ed. Kingston, MA: R.S. Means Company, Inc., 1992.
5. Alexander N. G., (1972) Designing Interior Environment, Mas Court Brace Covanorich, New York.

Good for Students who have Future Interests - webpages

1. Indian Textile Journal (Monthly Magazine), S. Joseph (Chief Editor), IPF online Ltd., Chennai.
2. Home textiles views bimonthly magazine – Jan 2012.
3. Window & Door, March 2007; Professional Door Dealer.
4. <http://www.pos-sg.com/unternehmen/ueber-uns/20.06.2016>.
5. Home textiles views bimonthly magazine – Jan 2012.
6. Council for Interior Design Accreditation (CIDA). 2011. Professional Standards,
7. <http://www.accredit-id.org/>.
8. <http://www.fibre2fashion.com>
9. <http://www.decorsolutions.ca>
10. Design Guide for Interiors – US army corps engineers, DG 1110-3-122 – Sep1997.
11. Inexpensive home décor © 2009, Prime Publishing LLC.

SEMESTER – V
DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL
BOUTIQUE DESIGNER – I (MEN’S CLOTHING)

Course Code: 23UPTAD2E08

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:0:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The Course is structured to provide practical skills regarding to establish a boutique for men’s clothing. The Students gain knowledge for design men’s garments and develop patterns for construction. This will also help students to calculate the cost the respective garments with adequate profit.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Organize boutique with required standards and Recognize the customer needs.	Psychomotor
CO2	Develop the technical flat sketches of the designed garments using suitable body measurements.	
CO3	Develop the pattern blocks for the designed garments and predict the appropriate pattern layout.	
CO4	Construct the designed garments with required measurements	
CO5	Calibrate the cost calculation for the garment with adequate profit.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	H	M	H	M	H	L	M
CO2	L		H	H	H	H	H	H	M	L	H
CO3	L	M	H	H	H	H	H	H	M	L	H
CO4	H	H	H	H	H	H	H	H	M	L	H
CO5	H	M	L	H	H	H	H	H	M	L	H

Unit	Unit Exercises	Learning Chapters
I	Customer profile	Understand customer needs and create the customer persona
II	Drawing for Inspiration	Personal sketch
	Drawing for Presentation	Fashion sketches and float
	Drawing for Specification	Flats or technical sketch
III	Body measurements	Take correct body measurements and know the standard measurement chart.
	Pattern Drafting	Suggested garments: Basic Shirt, Pant, T-shirt, Night Dress, Bermuda /shorts. Create a pattern for the given garment and its variation with different types of collar, pocket, sleeves, cuffs, and placket.
	Pattern Layout	Analyse different pattern layouts and place patterns to get fabric efficiency.
IV	Sewing techniques for component parts	Finishing technique - component parts for the given garments and give some variations in collar, sleeves, pocket, plackets, waistband and Hemlines.
	Garment construction	Create garments using different sewing techniques.
V	Costing	Estimate the cost calculation for the garment with adequate profit.

READING LISTS AND RESOURCES

Compulsory

1. Garment Construction A Complete Course on Making Clothing for Fit and Fashion By Peg Couch, 2011
2. The Complete Book of Sewing By Chris Jeffreys, DK Publishing, Inc, 2003
3. The New Complete Guide to Sewing Step-by-Step Techniques for Making Clothes and Home Accessories Updated Edition with All-New Projects and Simplicity Patterns By Editors of Reader's Digest, 2010
4. The Dressmaker's Companion A Practical Guide to Sewing Clothes By Elizabeth M. Haywood
5. The Dressmaker Complete Book on All Matters Connected with Sewing and Dressmaking from the Simplest Stitches to the Cutting, Making Altering, Mending and Caring for the Clothes By Butterick Publishing Company, 1916
6. Illustrated Guide to Sewing: Garment Construction A Complete Course on Making Clothing for Fit and fashion By Fox Chapel Publishing, Colleen Dorsey, 2011
7. Practical Pattern Making By Lucia Mors, Lucia Mors de Castro, Isabel Sánchez Hernández, 2015
8. Patternmaking For Fashion Design And DVD Package, 4/E (DVD) By Helen Joseph, 2008
9. Metric Pattern Cutting for Menswear By Winifred Aldrich, 2012
10. Menswear By John Hopkins, 2017

Highly recommended, not compulsory

11. Pattern Cutting for Menswear By Gareth Kershaw, 2013
12. Patternmaking for Menswear Classic to Contemporary By Myoungok Kim, Injoo Kim, 2014
13. How to Make Men's Clothes By Jane Rhinehart, 1976
14. Making Trousers for Men & Women A Multimedia Sewing workshop By David Page Coffin, 2009
15. Making Trousers How to Achieve Great results By David Page Coffin, 2009
16. Sewing Shirts with a Perfect Fit The Ultimate Guide to Fit, Style, and Construction from Collared and Cuffed to Blouses and Tunics By David Page Coffin, 2018
17. The Shirt making Work book Pattern, Design, and Construction Resources - More Than 100 Pattern Downloads for Collars, Cuffs & Plackets By David Page Coffin, 2015

Good for Students who have Future Interests

18. Laser Cutting for Fashion and Textiles By Laura Berens Baker, 2016
19. Pattern Cutting for Clothing Using CAD How to Use Lectra Modaris Pattern Cutting Software. By M Stott, 2012
20. <https://www.thesprucecrafts.com/techniques-for-sewing-clothing-2978471>

SEMESTER - V
DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL
BOUTIQUE DESIGNER - I (WOMEN'S CLOTHING)

Course Code: 23UPTAD2E09

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:0:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The Course is structured to provide practical skills regarding to establish a boutique for women's clothing. The Students gain knowledge for design women's garments and develop patterns for construction and to calculate the cost the respective garments with adequate profit.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Organize boutique with required standards and Recognize the customer needs.	Psychomotor
CO2	Develop the technical flat sketches of the designed garments using suitable body measurements.	
CO3	Develop the pattern blocks for the designed garments and predict the appropriate pattern layout.	
CO4	Construct the designed garments with required measurements	
CO5	Calibrate the cost calculation for the garment with adequate profit.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M		L	H	M	M	H	M	H	M	M
CO2	L	M	H	H	H	H	H	H	M	H	H
CO3	L	M	H	H	H	H	H	H	M	H	H
CO4	H	M	H	H	H	H	H	H	M	H	
CO5	H	M	H	H	H	H	H	H	M	H	H

Unit	Unit Exercises	Learning Chapters
I	Customer profile	Understand customer needs and create the customer persona
II	Drawing for Inspiration	Personal sketch
	Drawing for Presentation	Fashion sketches and float
	Drawing for Specification	Flats or technical sketch
III	Body measurements	Take correct body measurements and know the standard measurement chart.
	Pattern Drafting	Suggested garments: Salwar, Kameez, Skirt, Ladies pant, Western top Create a pattern for the given garment and its variation with different types of neck line, sleeves, placket, collar, yoke.
	Pattern Layout	Analyse different pattern layouts and place patterns to get fabric efficiency.
IV	Sewing techniques for component parts	Finishing technique - component parts for the given garments and give some variations in collar, sleeves, pocket, plackets, waistband and Hemlines.
	Garment construction	Create garments using different sewing techniques.
V	Costing	Estimate the cost calculation for the garment with adequate profit.

READING LISTS AND RESOURCES

Compulsory

1. Garment Construction Complete Course on Making Clothing for Fit and Fashion By Peg Couch , 2011
2. The Complete Book of Sewing By Chris Jeffreys, DK Publishing, Inc, 2003
3. The New Complete Guide to Sewing Step-by-Step Techniques for Making Clothes and Home Accessories Updated Edition with All-New Projects and Simplicity Patterns By Editors of Reader's Digest, 2010
4. The Dressmaker's Companion A Practical Guide to Sewing Clothes By Elizabeth M. Haywood
5. The Dressmaker Complete Book on All Matters Connected with Sewing and Dressmaking from the Simplest Stitches to the Cutting, Making Altering, Mending and Caring for the ClothesByButterick Publishing Company, 1916
6. Metric Pattern Cutting for Women's Wear By Winifred Aldrich, 2015

Highly recommended, not compulsory

7. Clothing, Simplicity-economy for the High School Girl By Laura Irene Balddt, Helen D. Harkness, 1931
8. Sew Sweet Handmade Clothes for Girls22 Easy-to-Make Dresses, Skirts, Pants & Tops Girls Will Love By Yuki Araki, 2014
9. Carefree Clothes for Girls20 Patterns for Outdoor Frocks, Playdate Dresses, and More ByJunko Okawa, 2009
10. Modern Style for Girls Sew a Boutique Wardrobe By Mary Abreu, 2015
11. Clothing for Women; Selection, Design, ConstructionA Practical Manual for School and HomeBy Laura Irene Balddt, 1916
12. Pattern Cutting Techniques for Ladies' JacketsBy Jo Baker-Waters, 2016
13. Making Trousers for Men &Women A Multimedia Sewing Workshop By David Page Coffin, 2009
14. Making Trousers How to Achieve Great Results By David Page Coffin, 2009
15. The Shirtmaking WorkbookPattern, Design, and Construction Resources - More Than 100 Pattern Downloads for Collars, Cuffs & PlacketsBy David Page Coffin, 2015

Good for Students who have Future Interests

16. Making Working Women's CostumePatterns for Clothes from the Mid-15th to Mid-20th CenturiesBy Elizabeth Friendship, 2015
17. Laser Cutting for Fashion and TextilesBy Laura Berens Baker, 2016
18. Pattern Cutting for Women's Tailored JacketsClassic and ContemporaryBy Winifred Aldrich, 2002
19. <https://www.thesprucecrafts.com/techniques-for-sewing-clothing-2978471>
20. <https://study.com/academy/lesson/clothing-construction-terms-basics-methods.html>

SEMESTER – V**DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL****SURFACE EMBELLISHMENTS AND TRADITIONAL EMBROIDERY PRACTICAL****Course Code:** 23UPTAD2E10**Marks:** 100 Marks (Internal-40; External-60)**L:T:P** – 1:0:2**Course Duration** : 75 Hours**Credit:** 02**Course Description:**

The Course structured to provide practical skills in pattern development and construction for children's garments also this will help students to calculate the cost calculation and fabric requirement for the respective garments.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Perform the different types of sewing techniques used in fabric Surface embellishment.	Psychomotor
CO2	Create the different types of Surface embellishment samples using various accessories and trims.	
CO3	Combine the basic and decorative stitches in the fabrics for representing various traditions in India.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		H	H	H	H	H	H	M	H	M	L
CO2		H	H	H	H	H	H	M	H	M	L
CO3	H	H	H	H	H	H	H	M	H	M	L

Unit	Unit Title	Learning Chapters
I	Surface embellishment – using sewing techniques	Prepare the samples by using the following techniques <ul style="list-style-type: none"> ➤ Smocking, ➤ Couching ➤ Quilting ➤ Fagoting ➤ Darning
II	Surface embellishment – using decorative articles	Prepare the samples by using:- <ul style="list-style-type: none"> ➤ Beads ➤ Sequins Work, ➤ Mirror Work, ➤ Applique Work, ➤ <u>Trimming</u> (Fringe trim, Sewing trim) ➤ Lacework (either pre-made or home-made) ➤ Piping (contrast fabric or a simply a cord.)
III	Traditional Embroidery in India	Prepare the <u>Traditional Embroidery samples using appropriate stitches:</u> <ul style="list-style-type: none"> ➤ Chikankari of Lucknow, ➤ Kasida of Kashmir, ➤ Phulkari of Punjab, ➤ Chamba Rumal of Himachal Pradesh,

- | | | |
|--|--|---|
| | | <ul style="list-style-type: none"> ➤ Kutch & Kathiawar of Gujarat, ➤ Kasutu of Karnataka, ➤ Lambadi Embroidery, ➤ Kantha of Bengal and ➤ Sujani of Bihar |
|--|--|---|

READING LISTS AND RESOURCES

Compulsory

14. Embroidery Stitches – Mary Webb, 2006, China, Pages 28 – 34
15. Traditional Embroideries of India By Shailaja D. Naik, 1996
16. Learning the Traditional Art of Hand Embroidery By DueepJyot Singh, John Davidson, 2016
17. Ritu, Attractive Embroidery Designs, Indica Publishers, 1995.
18. Shailaja m. and Naik. D., Traditional Embroideries of India, KPH Publishing Corporation, 1996.
19. Treasury of Smocking Designs, Allyne S. Holland, New York, 1985.
20. Embroidery Stitches – Mary Webb, 2006, China, Pages 28 – 34
21. Indian Embroideries: Threads That Weave Together The Fabric Of India By Aditi Ray, 2017

Highly Recommended, not Compulsory

22. How to Teach Yourself Cutwork Embroidery by DueepJyot Singh, John Davidson, 2017
23. Learning the Traditional Art of Hand Embroidery by DueepJyot Singh, John Davidson, 2016
24. Learning Patchwork - Traditional Patchwork Techniques By DueepJyot Singh, John Davidson, 2016
25. Learn to Quilt By DueepJyot Singh, John Davidson, 2016
26. Learning Decorative Stitches The Art of Shirring and Smocking By DueepJyot Singh, John Davidson, 2016

Good for Students who have Future Interests

27. Traditional Embroidery of India Volume 2 By Kamala Sunderrao Kulkarni Dongerkery, 1963
28. Embroidery Traditional Designs, Techniques, and Patterns from All Over the World By Mary Gostelow, 1983
29. Design for Embroidery, from Traditional English Sources By Constance Howard, 1956
30. Modern Embroidery Series, MBD Publishers, 1995.
31. Kit Pynan and Carole, The Harmony Guide to Decorative Needle Craft, Lyric Books Ltd., 1982
32. https://www.usha.com/sites/default/files/sewing_tutorials/machine-embroidery-book.pdf

SEMESTER – V
VALUE EDUCATION
YOGA AND FITNESS PRACTICAL

Course Code: 23UPTAD2V02

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:2:0

Course Duration : 30 Hours

Credit: 02

Course Description:

The course allows students to improve their physical fitness and mental health. It leads to reduce their mental stress and improves the posture. This also helps the student to improve their inner strengths which focus in the present and make them happier as well as their self-esteem.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Demonstrate breathing exercises and different kiriyas techniques.	Psychomotor
CO2	Perform the Standing, Sitting, Prone and Supine postures of yoga	
CO3	Express dharana and meditation stages of astanga yogic techniques.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H			M	M	H	H	
CO2				H			M	M	H	H	
CO3				H			M	M	H	H	

Unit	Unit Title	Learning Chapters
I	Breathing Exercises and Kiriyas	Surya Namaskar, Breathing Exercises – Thanduvada Suthi, Nadi Suthi, Kapalabathi, Kiriyas - OMM Chanting (AAA, UUUU, MMMM).
II	Different Postures of yoga	Standing Postures: Tadasana, Chakrasana, Thirikonasana, Nindra Pathasana and Ukattasana. Sitting Postures: Thandasana, Sughasana, Padmasana, Yoga Muthra, Mandookasana, Vajrasana and Maha Mudra. Prone Postures: Maharasana, Dhanurasana, Pujangasana and Salabasana. Supine Postures: Sethubanadasan, Sarvangasana, Pavanamuktasana, Halasana and Savasana
III	Astanga Stages of Yoga	Astanga Stages of Yoga - Yama, Niyama, Dharana, Prathiyagara, Dhiyana (Meditation) and Samathi.

READING LISTS AND RESOURCES

Compulsory

- Ashtanga Yoga the Essential Step-by-step Guide to Dynamic Yoga by John cott, 2018
- Yoga for the Three Stages of Life, and a Guiding Philosophy by Srivatsa Ramaswami, 2001
- Yoga Anatomy By Leslie Kaminoff, Amy Matthews, 2011

Highly Recommended, not Compulsory

- The Power of Ashtanga Yoga Developing a Practice That Will Bring You Strength, Flexibility, and Inner Peace - -Includes the Complete Primary Series by Kino MacGregor, 2013
- Yoga Sutras of Patanjali by Maharishi Patanjali, 2018

Good for Students who have Future Interests

- Yoga The Top 100 Best Yoga Poses: Relieve Stress, Increase Flexibility, and Gain Strength by Susan Hollister, 2017

SEMESTER – V
CORE COURSE PRACTICAL
FABRIC STRUCTURE ANALYSIS PRACTICAL

Course Code: 23UPTAD2L05

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 2:0:2

Course Duration : 45 Hours

Credit: 03

Course Description:

This course allows students to identify fabric structures, create design, draft and peg plan for various woven and knitted fabrics and develop a set of textile design skills by exploring various fabric structures and their applications.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Demonstrate the weave design, draft, and peg plan for basic woven fabrics.	Psychomotor
CO2	Determine ends per inch & picks per inch for complex weave woven fabrics.	
CO3	Built diagrammatic representation of knitted fabrics.	
CO4	Identify direction of the course and wales in the knitted fabrics.	
CO5	Discover the defects present in fabric surface and imply their remedies.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H		H	H	H	M	M	M	M		M
CO2	H		H	H	H	M	M	M	M		M
CO3	H		H	H	H	M	M	M	M		M
CO4	H		H	H	H	M	M	M	M		M
CO5	H		H	H	H	M	M	M	M		M

Unit	Unit Title	Learning Chapters
I	Woven Fabric Design Analysis of Basic Weaves	Analyse the given woven fabric swatches and furnish the following details: a) Design b) Draft c) Peg-plan d) EPI & PPI e) Warp and Weft Count f) Crimp Percentage g) GSM h) Twist direction. Fabrics: Plain and derivatives, Twill and derivatives, Satin and Sateen, Diamond, Honeycomb Weave, Mock leno.
II	Woven Fabric Design Analysis of Complex Weaves	Determine the given woven fabric swatches and furnish the following: a) Design b) Draft c) Peg-plan d) EPI & PPI e) Warp and Weft Count f) Crimp Percentage g) GSM h) Twist direction. Fabrics: Huck a back Weave, Crepe Weave, Double Cloth, Extra Warp and Weft Figuring
III	Knitted fabric Design Identification	Analyze the given knit fabric swatches and furnish the following details. a) Design Structure b) Loop Formation Fabrics: Plain knit, Rib knit, Interlock, Purl knit, Tricot, Raschel.
IV	Knitted fabric particulars	Identify the given knit fabric swatches and furnish the following details. a) Course direction b)Wales direction c) GSM Fabrics: Plain knit, Rib knit, Interlock, Purl knit, Tricot, Raschel.
V	Defect Identification	Defect Analysis for given fabrics (Weaving/Knitting/Processing defects) – Major and Minor defects occurred.

Laboratory Equipment:

Pick Glass, Needle, Scissors, Measuring Tools (Steel Scale, Inch Tape), Weighing Balance, GSM cutter, Beesley's balance.

READING LISTS AND RESOURCES**Compulsory**

1. Structure and Mechanics of Woven Fabrics by Jinlian Hu, 2004
2. Knitted Fabrics by John Chamberlain, James Henry Quilter, 1924
3. Corbmann B P, International students edition, Textiles – fibre to fabric, McGraw Hill book Co, Singapore, 1985
4. Watson's, Grosickli Z Newness, Butter worths, Advanced Textile Design London, 1989
5. Fabric Structure and Design by N. Gokarneshan, 2009
6. Woven Textile Structure Theory and Applications by BK Behera, P KHari, 2010
7. Structural Textile Design Interlacing and Interlooping by Syed Talha Ali Hamdani, Khubab Shaker, 2017
8. Watson's Textile Design and Colour, Vol. 1, Grosicki Z. J., Wood head Publications, Cambridge England, 2004.
9. Principles of Fabric Formation by Prabir Kumar Banerjee, 2014
10. Fundamentals and Advances in Knitting Technology by Sadhan C. Ray, 2012

Highly Recommended, not Compulsory

11. Woven Fabric Structure Design and Product Planning by J. Hayavadana, 2016
12. Woven Textiles Principles, Technologies and Applications, 2012
13. Woven Textile Design by Jan Shenton, 2014
14. Fundamentals and Advances in Knitting Technology by Sadhan C. Ray, 2012
15. Textiles Technology by Julie Messenger, Helen Wilson, 2003
16. Warp Knitted Fabrics Construction by Yordan Kyosev, 2019
17. Knitting: Colour, structure and design Alison Ellen Crowood, 21-Dec-2013

Good for Students who have Future Interests

18. Woven Textiles Principles, Technologies and Applications, 2012
19. Hand book of Weaving by Sabit Adanur, 2019
20. Fabric structure and design by Gokarneshan, D. N. New Age International (P) Ltd, New Delhi (2009).
21. Knitting Fundamentals, Machines, Structures And Developments by N. Anbumani, 2007.

SEMESTER – V**CORE COURSE PRACTICAL****DIGITAL AND GRAPHIC DESIGN STUDIES IN APPAREL INDUSTRY****Course Code:** 23UPTAD2L06**Marks:** 100 Marks (Internal-40; External-60)**L:T:P** – 2:1:2**Course Duration** : 75 Hours**Credit:** 04**Course Description:**

Digital Design Studies is designed to edit two-dimensional images such as logos, posters etc., This subject will provide the students with some graphic design lessons and tips to develop exceptional graphic design styles. Understanding the fundamentals of graphic design and improving texture in design work can elevate students' work from mediocrity to greatness. This is a drawing program for windows in which we can create professional artwork like Logos, all types of cards, calendar, stationery, magazines, for the enterprise.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Execute the garments component designs and fashion silhouette for apparel and fashion industry.	Psychomotor
CO2	Develop logo, labels and printing designs in Digital design software.	
CO3	Modify Weave designs into Flat Sketches and create the dress designs on mannequins.	
CO4	Transform 3-D images by changing the textures and apply into the flat sketches and create Digital Fashion Portfolio Boards creation.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			H	M	H	L	M	L	L	L	H
CO2			H	M	H	L	M	L	L	L	H
CO3			H	H	H	L	M	L	L	L	H
CO4			H	H	H	L	H	M	M	L	H

Unit	Unit Title	Learning Chapters
I	Manipulate garment Outlines	<ul style="list-style-type: none"> ➤ Manipulating flat sketches for style changes – Collar, Sleeve, Placket, Pocket, Hemline, Stitch line. ➤ Creating design for fashion silhouette suitable for apparel and fashion industry. ➤ Creating Duotone & Monochrome Images
II	Logo creation and develop printing designs	<ul style="list-style-type: none"> ➤ Labels–Style label, Size label. ➤ Logo–Brand logo, Style logo. ➤ Transfer sticker designing, ➤ Developing screen for spot, ➤ All over border designs.
III	Textiles Design and flat sketches	<ul style="list-style-type: none"> ➤ Checks and Prints. ➤ Application of Weave designs to Flat Sketches ➤ Application of dress designs on mannequins.
IV	Texture Mapping	<ul style="list-style-type: none"> ➤ Merging 3-D Images Modifying the textures. ➤ Digital Fashion Portfolio Boards creation.

READING LISTS AND RESOURCES

Compulsory

1. Drawing for Graphic Design Understanding Conceptual Principles and Practical Techniques to Create Unique, Effective Design Solutions by Timothy Samara, 2012
2. COREL DRAW TRAININGGUIDE By Satish Jain/M.Geetha, 2018
3. Inside CorelDRAW! The Practical Guide to Computer-aided Graphic Design By Daniel Gray, 1991
4. Straight to the Point :Corel DRAW 12 By Firewall Media, 2010
5. CorelDRAW X6 The Official Guide By Gary David Bouton, 2012
6. Fashion Artist Drawing Techniques to Portfolio Presentation By Sandra Burke, 2003

Highly Recommended, not Compulsory

7. Fashion Computing Design Techniques and Cade by Sandra Burke, 2006
8. The Adobe Graphic Design Software CS4 Layers Book Harnessing Graphic Design Software's Most Powerful Tool by Richard Lynch, 2009
9. The CorelDRAW Wow! Book By Linnea Dayton, Shane Hunt, Sharon Steuer, 1999

Good for Students who have Future Interests

10. https://www.coreldraw.com/static/cdgs/pdfs/dx4/CDTS_Case_Study_Lindex_EN_Letter.pdf
11. <https://www.coreldraw.com/en/pages/items/17700700.html>
12. <https://www.youtube.com/watch?v=fxjpHaBVEHM>
13. Creative Workshop 80 Challenges to Sharpen Your Design Skills, 2010

SEMESTER – V
CORE COURSE PRACTICAL
PORTFOLIO – SOURCING TECHNIQUES AND SKILLS

Course Code: 23UPTAD2L07

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 2:3:0

Course Duration : 75 Hours

Credit: 05

Course Description:

The course is designed for procurement of fabrics, trims & accessories as per requirements received from merchandiser. The students are able to supervise the functionary of purchase departments concerned with identifying suitable suppliers for materials assessed on the basis of price, quality, reliability, time and long term business relations.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Analyze the varies types of Garments, Fabric, Accessories and Trims	Psychomotor
CO2	Execute the different types of Material Procurement Strategies as per required criteria.	
CO3	Evaluate the supplier as per their Capability and ranking parameters.	
CO4	Carry out the records and documents about sourcing and future reference.	

Course Outcomes (Cos)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H	H	H	H	H	M	H	H	H	M	L
CO2	H	H	L	H	H	M	M	M	H	L	L
CO3			L	H	H	M	M	M	H	L	M
CO4			L	H	H	M	M	M	H	L	M

Unit	Unit Title	Learning Chapters
I	Categories of Costumes	<ul style="list-style-type: none"> • Various types of Garments – Men’s, Women’s and Kid’s. • Fabrics – Various Types & Swatches • Accessories & Trims – Reliable, Non-reliable & Swatches. • Various brands for apparel • Different types of woven and knit fabric structure and their trade names • Special fabrics in apparel made ups and home furnishing. • Garment manufacturing process • Forecasting upcoming trends, Demands
II	Material Procurement Strategies	<ul style="list-style-type: none"> • Plan the materials procurement as per the customer requirements • Forecast and Market studies. • Procurement tools and techniques, procurement Risks. • Supply chain management and Supply Lead time • Cost Analysis and Benchmark - Currency values • Budget and Cost negotiation • Defects Identification on fabrics, Accessories & Trims
III	Supplier Evaluation	<ul style="list-style-type: none"> • Vendor identification, • Supplier Capability • Vendor Ranking – Quality, Quantity, On time Delivery, Price

		<ul style="list-style-type: none"> • Price Quotation • Supplier comparison index • Logistic constraints • Supplier contract • Supplier from both local and international market
IV	Supervise and evaluate performance	<ul style="list-style-type: none"> • Quality parameters on received materials. • Purchase Quote for materials, Accessories & Trims • Letter of credit documents • Garment Costing • Packing List • Maintain health, safety and security in the sourcing department • Different hazards at workplace • Various Health & safety equipment • Records of internal and external communications • Computer applications for record maintenance

READING LISTS AND RESOURCES

Compulsory

1. Goworek, H. (2007), Fashion Buying, 2nd Edition, Blackwell Publishing, Oxford.
2. Jackson, T. and Shaw, D. (2000), Mastering Fashion Buying and Merchandising Management, Palgrave Macmillan, London.
3. Hines, T. and Bruce, M. (2001), Fashion Marketing: Contemporary Issues, Butterworth-Heinemann, Oxford.
4. Mintel Reports: Value Clothing Retailing (May 2005); Clothing Retailing (July 2005); Keynote Reports: Clothing Manufacturing (May 2006);
5. Clothing and Footwear Industry (March 2006).

Highly Recommended, not Compulsory

6. Baker, M.J. and Hart, S. (2007), Product Strategy and Management, 2nd Edition, FT Prentice Hall, London.
7. Cravens, D.W. and Piercy, N. (2005), Strategic Marketing, 9th Edition, McGraw-Hill, London.
8. Nagle, T.T. and Hogan, J.E. (2007), The Strategy and Tactics of Pricing: A Guide to Growing More Profitably, 4th Edition, Pearson Education, London.

Good for Students who have Future Interests

9. Marciniak, R. and Willans, J.R. (2008), Fashion Retailing, Blackwell, London.

SEMESTER – V
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M05

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – V**SKILL ENHANCEMENT COURSE****INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT****Course Code:** 23UPTAD2I05**Marks:** 100 Marks (Internal-40; External-60)**L:T:P** – 21 Hours/Week**Course Duration** : 10-15 days**Credit:** 04**Course Description:**

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.

SEMESTER - VI
CORE COURSE THEORY
DESIGN THINKING FOR INNOVATION

Course Code: 23UPTAD2C07

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:3:0

Course Duration : 75 Hours

Credit: 05

Course Description:

This course enables the Students to learn about design thinking and hence resolve the problem by innovate the new design strategies which encountered. It also describes the variety of approaches and concepts within the design thinking discipline. This encourages the students to construct various prototypes for different end uses and to lead project management in entrepreneurship.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Discuss the basics of Design thinking context.	Cognitive
CO2	Describe the variety of design thinking concepts and mindset process and principles.	
CO3	Determine the design thinking tools to be applied in solving problems.	
CO4	Practice the appropriate strategies of design and its applications of product development.	
CO5	Explore the new idea and solutions for entrepreneurial business model.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			H	H	M	M	H	M	M	L	
CO2			H	H	M	M	H	M	M	L	
CO3			H	H	M	M	H	M	M	L	
CO4			H	H	M	M	H	M	M	L	
CO5			H	H	M	M	H	M	M	L	

Unit	Unit Title	Learning Chapters
I	Design thinking context	Definition and Difference between Thinking, Innovation, Invention, Creativity and modernization. Design Thinking – Origin, Need, Philosophy and Rules – Human, Ambiguity, Re-design and Tangibility Rule. Principles – Various Resources – people, place, material and organizational fit. Features and Uses of Design Thinking.
II	Design thinking concepts and mindset	Fundamental Concepts in Design Thinking – Solution based and Problem focused, Scientific method and Iterative approach, Analysis and synthesis, Empathize, Divergent Thinking, Convergent Thinking, Visual Thinking – Brainstorming, Flash cards, Flow charts and other elements. Design Thinking mindset – Process and principles.
III	Design thinking tools and procedure	Design thinking tools and methods – toolbox – purposeful use of tools and alignment with process stages – what is, what if, what wows and what works. Design thinking process procedures – numerous approaches, double diamond process, 5- Stage school process and designing for growth process.

IV	Design thinking performance	Strategy and design – ten practices of strategy design – projecting – prototyping –Evaluation – experimenting – routinizing – mobilizing – realizing –connecting – scaling – Curating. Design Thinking application – role of product development and project management.
V	Design thinking for entrepreneurship	POV – Explore new ideas and shape own brand. Design thinking for revolutionizing business model – initiation, ideation, integration and Implementation. Entrepreneurial design management.

READING LISTS AND RESOURCES

Compulsory

1. Design Thinking for Innovation: Research and Practice books Walter Brenner, Falk Uebernickel, 2016
2. Design Thinking for Strategic Innovation: What They Can't books Idris Mootee, 2013
3. Design Thinking: New Product Development Essentials from the books Michael G. Luchs, Scott Swan, Abbie Griffin, 2015
4. Textiles, Identity, and Innovation: Design the Future: books Gianni Montagna, Cristina Carvalho, 2018

Highly Recommended, not Compulsory

5. Engineering Textiles: Integrating the Design and Manufacture books Yehia E. Elmogahzy, 2019
6. Creative Workshop: 80 Challenges to Sharpen Your Design Skills books David Sherwin, 2010
7. Design Thinking for the Greater Good Innovation in the Social Sector by Jeanne Liedtka, Randy Salzman, Daisy Azer, 2017

Good for Students who have Future Interests

16. <https://tallyfy.com/guides/lean-six-sigma/>
17. <https://www.sixsigmadaily.com/how-to-implement-six-sigma-in-an-organization/>
18. <https://www.greycampus.com/blog/quality-management/dmaic-a-six-sigma-process-improvement-methodology>
19. <https://www.reliableplant.com/Read/30141/lean-six-sigma>

SEMESTER – VI
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
APPAREL MARKETING

Course Code: 23UPTAD2E11

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course provides students with a comprehensive understanding of marketing concepts specifically tailored to the apparel industry. It emphasizes critical areas such as market analysis, consumer behavior, product development, pricing strategies, and promotional tactics. Through theoretical knowledge and practical applications, students will develop the skills necessary to effectively navigate the dynamic landscape of apparel marketing.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Distinguish and evaluate marketing concepts, functions, and strategies in the apparel industry.	Cognitive
CO2	Discover market segments and apply the STP approach to consumer behavior and demand forecasting.	
CO3	Analyze product life cycle stages and generate innovative marketing ideas within the Indian market context.	
CO4	Apply various product classification and pricing strategies relevant to the apparel sector.	
CO5	Distinguish effective promotional strategies and understand the role of media in marketing apparel products.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	H	M	H	H	M		
CO2				H	H	M	H	H	M		
CO3				H	H	M	H	H	M		
CO4				H	H	M	H	H	M		
CO5				H	H	M	H	H	M		

Unit	Unit Title	Learning Chapters
I	Concept of Marketing Market	Marketing Definition, Nature, Scope and Importance of Marketing, Functions of Marketing, Marketing Management, Marketing Process, Marketing Tasks Scope of Marketing, Marketing Communication System, Holistic Concept, Difference Between Selling and Marketing, 4ps 7Ps of Marketing, Customer Relationship Management (CRM), Sustainable and Ethical Issues Marketing, Marketing Channels and Distribution Systems
II	Management concept	Identification of market, Market Segmentation, STP Approach Market Information System, (MIS) Market Research Consumer Behaviour Demand Forecasting. Buyer Decision Process, Factors Influencing Consumer Behavior, Competitive Analysis and Positioning, Demand Management Strategies, Trends in Consumer Behavior, Market Size Estimation

		and Analysis, Forecasting Techniques and Models.
III	Marketing ideas	Indian Market & Its Environment-Market Segmentation, Targeting, Positioning Levels of Market Segmentations, Patterns, Procedures, Classification Product-Mix, Product Life Cycle Strategies, Product Diffusion Process, concept of a Product - Product Decisions - Product mix decisions – Brand, Brand Decision - New Product Development – Sources of New Product idea - Steps in Product Development - Product Life Cycle strategies- Stages in Product Life Cycle.
IV	Product Pricing Strategies	Product -Product Classification-Product Characteristics, Product Differentiation, Product Positioning, Product Line and Product Mix, Market Research for New Product Development, Stages of New Product Development, Cross-Functional Collaboration in Product Development, Product Life Cycle Stages, Marketing Strategies for Each Life Cycle Stage, Brand Equity and Brand Loyalty, Types of Branding Strategies, Co-Branding and Brand Extensions, Labeling Regulations and Requirements, Labeling as a Marketing Tool, Types of Packaging, Sustainable Packaging Solutions, Packaging Design and Consumer Perception, Pricing Objectives, Cost-Based Pricing, Value-Based Pricing, Competitive Pricing Strategies, and Dynamic Pricing Strategies.
V	Promotion	Promotion Decision - Strategy Development, Elements of the Promotion Mix, Types of Advertising (Print, Digital, Outdoor, etc.), Sales Promotion Techniques, Setting Advertising Objectives, Advertising Budgeting, Advertising Message Development, Creative Strategy in Advertising, Media Planning and Buying, Role of Social Media in Advertising, Measuring Advertisement Effectiveness, Sales Force Management, Sales Force Training and Development, Rural Marketing Strategies, Challenges in Rural Marketing, Opportunities in Rural Markets, Consumer Behavior in Rural Areas, Adapting Promotion Strategies for Rural Markets, and Case Studies of Successful Rural Marketing Campaigns.

READING LISTS AND RESOURCES

Compulsory

1. Marketing – R S N Pillai and Bhagavathi, Published by S Chand and Company Ltd, New Delhi, 1987.
2. Fashion Business – Dr. K. Prabha Kumari & D. Anita Rachel, Abhishek Publications. ISBN: 978-81-8247-68-4, 2018.
3. Marketing Management – Dr. B K Chatterjee, Jaico, Juice Publishing House, Bombay, 1982.
4. Principles of Marketing – Backman T N, Munard H H, and Davidson W R, Ronald Press Company, New York, 1970.

Highly recommended, not compulsory

5. Marketing Principles and Methods – Philip C F and Duncon, Irwin Publications.
6. Fashion Marketing – Mike Easey, Published by Blackwell Science Ltd, 1995.
7. The Fashion Marketing Handbook – Jayne M. K. Haskins, 2020.
8. Strategic Brand Management – Kevin Lane Keller, 4th Edition, Pearson, 2013.
9. Consumer Behavior in Fashion – Michael J. Haskins, 2019.
10. Fashion Retailing: A Multi-Channel Approach – Richard M. G. Sweeney, 2016.

Good for Students who have Future Interests

11. Marketing Fashion – by John J. A. O’Connell, 2018.
12. Fashion Marketing and Merchandising – by Mary L. G. Ryan and Joseph M. Thomas, 2020.
13. Retailing Management – by Michael Levy and Barton Weitz, 10th Edition, McGraw-Hill, 2018.
14. Principles of Retailing – by D. B. M. MacKenzie, 2016.
15. Fashion Merchandising: Principles and Practice – by John A. E. Lussier, 2017.

SEMESTER – VI
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
CARE AND MAINTENANCE OF TEXTILES – II

Course Code: 23UPTAD2E12

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course provides a comprehensive exploration of the principles and practices essential for the care and maintenance of textiles, encompassing fabric properties, laundering techniques, and preservation methods. This course is designed to prepare students for roles in textile care, preservation, and related fields within the industry.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Compare wet and dry cleaning methods also diverse drying and pressing techniques in fabric care and maintenance.	Cognitive
CO2	Devise the application of driers in institutional and commercial laundry settings including garment laundering equipment and procedures.	
CO3	Identify stains and specific chemicals and procedures for removing various stains as well as exploring dry cleaning methods.	
CO4	Explore the requirements and regulations for care labeling, and delves into various process descriptions indicated by care labels.	
CO5	Expertise in crafting care instructions in specific fiber types, also explore the health hazards, recent innovations and entrepreneurial opportunities within the laundering industry.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	H			H	M	M	L	M	L	L	
CO2	M			H	M	M	L	M	L	L	
CO3	H			H	H	M	L	M	L	L	
CO4	H			H	M	M	L	M	L	L	
CO5	H			H	H	M	L	M	L	L	

Unit	Unit Title	Learning Chapters
I	Cleaning of Textile Materials	Wet Cleaning Vs Dry Cleaning. Drying – Definition and types Line drying, Spin drying, Tumble drying, Indoor drying, Outdoor drying, Pressing – Definition, Parameters of pressing – Heat, Moisture, Pressure, Cooling. Effects of wet and dry cleaning on clothing properties.
II	Laundry Equipments	Dry cleaning machineries. Use of driers in institutional and commercial laundry the pressing equipment along with functions and uses. Laundry equipments in institutions and commercial laundries. Garment laundering equipments and procedures.
III	Stain Removal and Dry Cleaning	The immersion method of dry cleaning. Spot cleaning with grease solvents. Dry cleaning of clothes with application of grease absorbents. Dry cleaning recommendation for various clothes - dry cleaning of clothes by using grease solvents, dry-cleaning silk sari with stains in one place and all over the sari. Impact of stain removal on clothing properties.

IV	Care Labeling	Care Labeling Systems – ISO Care Labeling System, ASTM Care Labeling System, Canadian Care Labeling System, British Care Labeling System, Australian/Newzland Care Labeling System, Japanese Care Labeling System. Example of Care labels, Issues related to care labeling.
V	Environmental impacts of cleaning	Care Instructions for fibre type clothes and products – Cotton items, Woollen items, Silk items, Nylon items. Health hazards of cleaning – During wet or dry cleaning, Amount of left residual, cross-contamination of diseases. Recent innovations and Future trends in laundering, Entrepreneurial or venture opportunities in laundering.

READING LISTS AND RESOURCES

Compulsory

18. Care and Maintenance of Textile Products Including Apparel and Protective Clothing By Rajkishore Nayak, Saminathan Ratnapandian, CRC Press, 2018
19. "Textiles: Concepts and Principles" by Virginia Hencken Elsasser Year: 2016 Publisher: Fairchild Books
20. "Laundry: The Home Comforts Book of Caring for Clothes and Linens" by Cheryl Mendelson, Year: 2009, Publisher: Scribner
21. "A Consumer's Guide to Textile Cleaning" by Susan Rachman Year: 1993, Publisher: Butterworth-Heinemann
22. Susheela Danttyagi- Fundamentals of Textiles and their Care – Orient Longman- Hyderabad.
23. Bernard P Corbman – Textiles – Fiber to fabric- McGraw Hill Book company – New Delhi

Highly recommended, not compulsory

24. "Chemistry and Technology of Fabric Preparation and Finishing" by Charles Tomasino Year: 2014, Publisher: CRC Press
25. "Journal of Textile Science & Engineering"
26. DurgaDeulkar- Household Textiles and Laundry Work – Atma Ram and Sons- Delhi.
27. Noemia DSouza- Fabric Care- New Age International Limited, publishers, Hyderabad.
28. S R Karmakar – Chemical Technology in the pretreatment processes of textiles – Elsevier – New York.

Good for Students who have Future Interests - WebPages

29. American Cleaning Institute
30. Textile Exchange
31. Laundry and Home Care – Henkel
32. American Cleaning Institute - Cleaning101
33. <https://www.studiestoday.com/node/236713/viewfile.html>
34. Textile committee – Best Management Practices for pollution prevention in the textile industry.

SEMESTER – VI
DISCIPLINE SPECIFIC ELECTIVE COURSE THEORY
HOME TEXTILES – II

Course Code: 23UPTAD2E13

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course provides a comprehensive study of home textiles, interior furnishing, and their impact on living spaces. Covering floor coverings, living room furnishings, and bath & kitchen linens, students will gain insights into the selection, care, and aesthetic integration of these elements in domestic environments. The curriculum explores fabric characteristics, design principles, and sustainable choices, emphasizing the fusion of functionality and style.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Predict the global and Indian market dynamics and recent developments in the home furnishing sector, and contribute effectively to the industry.	Cognitive
CO2	Insights into interior lighting and color psychology, living room furniture, accessories, and dining room settings.	
CO3	Identify different resilient and hard floor floor coverings and its maintenance practices.	
CO4	Explore the requirements for living room furnishing elements, wall coverings, including paint and wallpapers	
CO5	Delve into bath linens, kitchen furnishings and insights into designing and accessorizing both bathroom and kitchen spaces.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1		L	H	H	H	H	H	M	L	L	
CO2	H	M	H	H	H	H	H	M	L	L	
CO3	M		H	H	H	H	H	M	L	L	
CO4	L	M	H	H	H	H	H	M	L	L	
CO5	M	L	H	H	H	H	H	M	L	L	

Unit	Unit Title	Learning Chapters
I	Home Textiles	Home Furnishing Industries in Global – Indian market share in Global. Growth of Indian Home furnishing Industry. SWOT analysis of home textiles industry. Government organisations and Associations related to Home textiles in India. Recent developments in home textiles.
II	Interior Furnishing and Lighting	Home decorating tips and ideas for best possible results. Interior lightings and color psychology - Types of lights, Psychological effects of various colors. Living room – furniture, accessories and designs, lighting. Dining room - traditional and ethnic pieces of clothing, modern dining room.
III	Floor Coverings	Resilient floor coverings – Vinyl flooring – types and benefits, Hard floor coverings - Plank flooring, Parquet flooring, Finished Flooring. Factors influencing the selection of different floor Covering. Maintenance of floor coverings.

IV	Living Room Furnishing	Living Room Furnishing - Sofa covers and sofa slip covers. Types of sofa covers. Cushion - Cushion cover materials, Cushion cover types, designs, Indian cushion covers. Bolster – Introduction and its origin, Fabrics used and steps involved in making bolster cover. Upholsteries - labeling of upholstery - testing labeling, Care labeling, Fabric grade labeling, Upholstery structure. Wall coverings – Paint, Wall papers, Appearance and characteristics.
V	Bath & Kitchen Linens	Bathroom furnishings - Bathroom fixtures, Bath accessories and furniture - Bath towels, Bath mats, Bath sheets, Bath rugs. mirrors, shower curtains. Bathroom lighting and light fixtures. Kitchen furnishings - Practical tips for kitchen décor, Kitchen furniture and accessories, Kitchen linen and its types, Kitchen cabinet, Kitchen lighting – Functional & Decorative

READING LISTS AND RESOURCES

Compulsory

8. Home Furnishing By [V. Ramesh Babu](#), [S. Sundaresan WPI India](#)· 2018
9. Home Furnishing Industry in India, By [Chillibreeze](#) Chillibreeze Publications, 2008.
10. Donserkery K. G., (1973) Interior Decoration in India, D. B. Taraporevala Sons and Co. Pvt Ltd., Mumbai.
11. Indian Textile Journal (Monthly Magazine), S. Joseph (Chief Editor), IPF online Ltd., Chennai.
12. Bruce N. Wright, Innovative Interior Textiles, AIA Vol 6; Issue 10, 2005.
13. Susan M. Winchip. Professional practice for Interior designers in the global market place, ISBN: 9781609011383, Fairchild Books, 2012.
14. Alexander N. G., (1972) Designing Interior Environment, Mas Court Brace Covanorich, New York.

Highly recommended, not compulsory

6. Colourage (Monthly Magazine), R. V. Raghavan (Editor), Colour Publications Pvt.Ltd., Mumbai Inside Outside (Monthly Magazine), Business India Publications.
7. Schwamborn: G. Grass, (2009) Hard floor cleaning.
8. Kleinschmidt, J. (2008, September). The ins and outs of fabric, Specialty Fabrics Review, 34.
9. Waier, Phillip R. (1993) Means Building Construction Cost Data. 51st ed. Kingston, MA: R.S. Means Company, Inc., 1992.
10. Alexander N. G., (1972) Designing Interior Environment, Mas Court Brace Covanorich, New York.

Good for Students who have Future Interests - webpages

12. Indian Textile Journal (Monthly Magazine), S. Joseph (Chief Editor), IPF online Ltd., Chennai.
13. Home textiles views bimonthly magazine – Jan 2012.
14. Window & Door, March 2007; Professional Door Dealer.
15. <http://www.pos-sg.com/unternehmen/ueber-uns/20.06.2016>.
16. Home textiles views bimonthly magazine – Jan 2012.
17. Council for Interior Design Accreditation (CIDA). 2011. Professional Standards,
18. <http://www.accredit-id.org/>.
19. <http://www.fibre2fashion.com>
20. <http://www.decorsolutions.ca>
21. Design Guide for Interiors – US army corps engineers, DG 1110-3-122 – Sep1997.
22. Inexpensive home décor © 2009, Prime Publishing LLC.

SEMESTER – VI
DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL
BOUTIQUE DESIGNER – II (MEN’S CLOTHING)

Course Code: 23UPTAD2E14

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:0:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The Course is structured to provide practical skills regarding to establish a boutique for men’s clothing. The Students gain knowledge for design men’s garments and develop patterns for construction. This will also help students to calculate the cost the respective garments with adequate profit.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Organize boutique with required standards and Recognize the customer needs.	Psychomotor
CO2	Develop the technical flat sketches of the designed garments using suitable body measurements.	
CO3	Generate a portfolio using different kinds of boards for designed garments.	
CO4	Develop the pattern blocks for the designed garments and predict the appropriate pattern layout.	
CO5	Construct the designed garments and calibrate the cost calculation.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M		L	H	M	M	H	M	H	M	M
CO2	L	M	H	H	H	H	H	H	M	H	H
CO3	L	M	H	H	H	H	H	H	M	H	H
CO4	H	M	H	H	H	H	H	H	M	H	
CO5	H	M	H	H	H	H	H	H	M	H	H

Unit	Unit Exercise	Learning Chapters
I	Organization of boutique	Selection of area, Size of boutique, Lay out, Interior design.
	Customer profile	Understand customer needs and create the customer persona.
II	Drawing for Inspiration	Personal sketch
	Drawing for Presentation	Fashion sketches and float
	Drawing for Specification	Flats or technical sketch
	Body measurements	Take correct body measurements and know the standard measurement chart.
III	Portfolio	Create a Theme board, Concept board, Mood Board for Men’s Casual wear/ Sportswear/ Party wear/ Ethnic wear. Suggested Garments- Designer Kurta / Sherwani, SB Vest, Dhoti pant/Jogger.
IV	Pattern Drafting	Create a pattern for the given garments and its variation With different types of collar, pocket, sleeves, cuffs and placket.
	Pattern Layout	Analyse different pattern layouts and place patterns to get fabric efficiency.

V	Sewing techniques for component parts	Finishing technique - component parts for the given garment and give some variations in collar, sleeves, pocket, plackets, waistband and Hemlines.
	Garment construction	Create garments using different sewing techniques.
	Costing	Estimate the cost calculation for the garment with adequate profit.

READING LISTS AND RESOURCES

Compulsory

1. Garment Construction A Complete Course on Making Clothing for Fit and Fashion By Peg Couch, 2011
2. The Complete Book of Sewing By Chris Jeffreys, DK Publishing, Inc, 2003
3. The New Complete Guide to Sewing Step-by-Step Techniques for Making Clothes and Home Accessories Updated Edition with All-New Projects and Simplicity Patterns By Editors of Reader's Digest, 2010
4. The Dressmaker's Companion A Practical Guide to Sewing Clothes By Elizabeth M. Haywood
5. The Dressmaker Complete Book on All Matters Connected with Sewing and Dressmaking from the Simplest Stitches to the Cutting, Making Altering, Mending and Caring for the Clothes By Butterick Publishing Company, 1916
6. Illustrated Guide to Sewing: Garment Construction A Complete Course on Making Clothing for Fit and fashion By Fox Chapel Publishing, Colleen Dorsey, 2011
7. Practical Pattern Making By Lucia Mors, Lucia Mors de Castro, Isabel Sánchez Hernández, 2015
8. Patternmaking For Fashion Design And DVD Package, 4/E (DVD) By Helen Joseph, 2008
9. Metric Pattern Cutting for Menswear By Winifred Aldrich, 2012
10. Menswear By John Hopkins, 2017

Highly recommended, not compulsory

11. Pattern Cutting for Menswear By Gareth Kershaw, 2013
12. Patternmaking for Menswear Classic to Contemporary By Myoungok Kim, Injoo Kim, 2014
13. How to Make Men's Clothes By Jane Rhinehart, 1976
14. Making Trousers for Men & Women A Multimedia Sewing workshop By David Page Coffin, 2009
15. Making Trousers How to Achieve Great results By David Page Coffin, 2009
16. Sewing Shirts with a Perfect Fit The Ultimate Guide to Fit, Style, and Construction from Collared and Cuffed to Blouses and Tunics By David Page Coffin, 2018
17. The Shirt making Work book Pattern, Design, and Construction Resources - More Than 100 Pattern Downloads for Collars, Cuffs & Plackets By David Page Coffin, 2015

Good for Students who have Future Interests

18. Laser Cutting for Fashion and Textiles By Laura Berens Baker, 2016
19. Pattern Cutting for Clothing Using CAD How to Use Lectra Modaris Pattern Cutting Software. By M Stott, 2012
20. <https://www.thesprucecrafts.com/techniques-for-sewing-clothing-2978471>

SEMESTER - VI
DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL
BOUTIQUE DESIGNER - II (WOMEN'S CLOTHING)

Course Code: 23UPTAD2E15

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:0:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The Course is structured to provide practical skills regarding to establish a boutique for women's clothing. The Students gain knowledge for design women's garments and develop patterns for construction. This will also help students to calculate the cost the respective garments with adequate profit.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Organize boutique with required standards and Recognize the customer needs.	Psychomotor
CO2	Develop the technical flat sketches of the designed garments using suitable body measurements.	
CO3	Generate a portfolio using different kinds of boards for designed garments.	
CO4	Develop the pattern blocks for the designed garments and predict the appropriate pattern layout.	
CO5	Construct the designed garments and calibrate the cost calculation.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M		L	H	M	M	H	M	H	M	M
CO2	L	M	H	H	H	H	H	H	M	H	H
CO3	L	M	H	H	H	H	H	H	M	H	H
CO4	H	M	H	H	H	H	H	H	M	H	
CO5	H	M	H	H	H	H	H	H	M	H	H

Unit	Unit Exercise	Learning Chapters
I	Organization of boutique	Selection of area, Size of boutique, Lay out, Interior design.
	Customer profile	Understand customer needs and create the customer persona.
II	Drawing for Inspiration	Personal sketch
	Drawing for Presentation	Fashion sketches and float
	Drawing for Specification	Flats or technical sketch
	Body measurements	Take correct body measurements and know the standard measurement chart.
III	Portfolio	Create a Theme board, Concept board, Mood Board for women's Casual wear/ Sportswear/ Party wear/ Ethnic wear. Suggested Garments- Designer Princess blouse, Lehanga set, Maxi, Co-ord set
IV	Pattern Drafting	Create a pattern for the given garments and its variation With different types of collar, pocket, sleeves, cuffs and placket.
	Pattern Layout	Analyse different pattern layouts and place patterns to get fabric efficiency.

V	Sewing techniques for component parts	Finishing technique - component parts for the given garment and give some variations in collar, sleeves, pocket, plackets, waistband and Hemlines.
	Garment construction	Create garments using different sewing techniques.
	Costing	Estimate the cost calculation for the garment with adequate profit.

READING LISTS AND RESOURCES

Compulsory

1. Garment Construction Complete Course on Making Clothing for Fit and Fashion By Peg Couch , 2011
2. The Complete Book of Sewing By Chris Jeffreys, DK Publishing, Inc, 2003
3. The New Complete Guide to Sewing Step-by-Step Techniques for Making Clothes and Home Accessories Updated Edition with All-New Projects and Simplicity Patterns By Editors of Reader's Digest, 2010
4. The Dressmaker's Companion A Practical Guide to Sewing Clothes By Elizabeth M. Haywood
5. The Dressmaker Complete Book on All Matters Connected with Sewing and Dressmaking from the Simplest Stitches to the Cutting, Making Altering, Mending and Caring for the Clothes By Butterick Publishing Company, 1916
6. Metric Pattern Cutting for Women's Wear By Winifred Aldrich, 2015

Highly recommended, not compulsory

7. Clothing, Simplicity-economy for the High School Girl By Laura Irene Baldt, Helen D. Harkness, 1931
8. Sew Sweet Handmade Clothes for Girls 22 Easy-to-Make Dresses, Skirts, Pants & Tops Girls Will Love By Yuki Araki, 2014
9. Carefree Clothes for Girls 20 Patterns for Outdoor Frocks, Playdate Dresses, and More By Junko Okawa, 2009
10. Modern Style for Girls Sew a Boutique Wardrobe By Mary Abreu, 2015
11. Clothing for Women; Selection, Design, Construction A Practical Manual for School and Home By Laura Irene Baldt, 1916
12. Pattern Cutting Techniques for Ladies' Jackets By Jo Baker-Waters, 2016
13. Making Trousers for Men & Women A Multimedia Sewing Workshop By David Page Coffin, 2009
14. Making Trousers How to Achieve Great Results By David Page Coffin, 2009
15. The Shirtmaking Workbook Pattern, Design, and Construction Resources - More Than 100 Pattern Downloads for Collars, Cuffs & Plackets By David Page Coffin, 2015

Good for Students who have Future Interests

16. Making Working Women's Costume Patterns for Clothes from the Mid-15th to Mid-20th Centuries By Elizabeth Friendship, 2015
17. Laser Cutting for Fashion and Textiles By Laura Berens Baker, 2016
18. Pattern Cutting for Women's Tailored Jackets Classic and Contemporary By Winifred Aldrich, 2002
19. <https://www.thesprucecrafts.com/techniques-for-sewing-clothing-2978471>
20. <https://study.com/academy/lesson/clothing-construction-terms-basics-methods.html>

SEMESTER – VI
DISCIPLINE SPECIFIC ELECTIVE COURSE PRACTICAL
ORNAMENTS AND ACCESSORIES

Course Code: 23UPTAD2E16

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:0:2

Course Duration : 75 Hours

Credit: 02

Course Description:

The Course structured to provide practical skills in pattern development and construction for children's garments also this will help students to calculate the cost calculation and fabric requirement for the respective garments.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Produce different types of thread work ornaments and accessories used for hand, ear and head.	Psychomotor
CO2	Create the different types bead and stone work ornaments and accessories	
CO3	Develop a Traditional bridal ornaments set for the different culture in India.	
CO4	Make the accessories for regular or functional use by using textile materials.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M	H	H	H	H	H	H	M	L	M	L
CO2	M	H	H	H	H	H	H	M	L	M	L
CO3	M	H	H	H	H	H	H	M	L	M	L
CO4	M	H	H	H	H	H	H	M	L	M	L

Unit	Unit Title	Learning Chapters
I	Quilling and Silk thread Work	Develop the Bracelet, Ring, Head bands, Earrings, Necklace, Bangles using Quiling and Silk thread work.
II	Bead and Stone work	Create Neck chain, Bracelet, Hip chain, Anklet. Hair clip, Saree pin, Hair band using Bead and Stone works
III	Bridal set	Design and Develop a Traditional bridal set for Indian Traditional.
IV	Accessories	Create Hand bags, Belts, Caps, Gloves, Purse or wallets using creative designs and materials.

READING LISTS AND RESOURCES

Compulsory

33. Traditional Embroideries of India By Shailaja D. Naik, 1996
34. Learning the Traditional Art of Hand Embroidery By DueepJyot Singh, John Davidson, 2016
35. Treasury of Smocking Designs, Allyne S. Holland, New York, 1985.

Highly Recommended, not Compulsory

36. How to Teach Yourself Cutwork Embroidery by DueepJyot Singh, John Davidson, 2017
37. Learning Patchwork - Traditional Patchwork Techniques By DueepJyot Singh, John Davidson, 2016
38. Learn to Quilt By DueepJyot Singh, John Davidson, 2016
39. Learning Decorative Stitches The Art of Shirring and Smocking By DueepJyot Singh, John Davidson, 2016

Good for Students who have Future Interests

40. Traditional Embroidery of India Volume 2 By Kamala Sunderrao Kulkarni Dongerkery, 1963
41. Embroidery Traditional Designs, Techniques, and Patterns from All Over the World By Mary Gostelow, 1983

SEMESTER – VI
SKILL ENHANCEMENT COURSE
PROFESSIONAL COMPETENCY SKILL

Course Code: 23UPTAD2S06

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 2:0:0

Course Duration : 30 Hours

Credit: 02

Course Description:

This course is designed to equip students with the essential skills needed to thrive in a professional work environment. It covers critical areas such as maintaining professionalism, effective workplace communication, problem-solving strategies, awareness of workplace harassment, and effective work planning and organization. Through practical activities and case studies, students will develop competencies that enhance their employability and workplace effectiveness.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Demonstrate workplace professionalism and adhering to ethical standards in work conduct.	Cognitive
CO2	Perform effective workplace communication and responsive handling of customer requests.	
CO3	Express effective problem-solving in work activities and provide recommendations to the relevant authorities.	
CO4	Recognize proper behavior in self-defense and harassment resolution techniques.	
CO5	Organize work by setting and monitoring work. Also it addresses leadership skills for leading small teams and monitoring team effectiveness.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1			L	H	H	L	H	H	H	H	M
CO2			L	H	H	L	H	H	H	H	M
CO3			L	H	H	L	H	H	H	H	M
CO4			L	H	H	H	H	H	H	H	M
CO5			L	H	H	H	H	H	H	H	M

Unit	Unit Title	Learning Chapters
I	Professionalism	Maintain professionalism in the workplace - Respect work timeframes, maintain personal appearance and hygiene, Maintain adequate distance with colleagues and clients, Work in an ethical manner (honesty, work integrity, work ethics).
II	Workplace communication	Workplace communication - Follow routine verbal and written instructions, develop effective workplace relationships, Communicate and work with team members, Respond effectively to customer requests.
III	Problem solving	Problem solving in work activities - Identify and examine problem, determine fundamental causes of the problem, determine corrective action, Provide recommendations to authorities.
IV	Workplace harassment	Workplace harassment - Identify the difference between acceptable behavior and unacceptable behavior, define workplace harassment - types of harassment. strategies to protect self and deal with workplace harassment, Support colleagues and assist in creating a harassment policy.

V	Work Planning and organizing	Plan and organize work - Set objectives and plan work activities, Plan and schedule work activities, implement work plans, Monitor work activities. Lead small teams - Motivate and build the team, facilitate team development and monitor team effectiveness.
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READING LISTS AND RESOURCES

Compulsory

1. Professionalism in the Workplace – by Richard L. Daft, 2020.
2. Business Communication Essentials – by Courtland L. Bovee and John V. Thill, 2019.
3. Problem Solving in Organizations – by Robert D. Austin and Richard L. Nolan, 2018.
4. Workplace Harassment: Prevention and Response – by Eric J. Frazier, 2017.
5. Effective Work Planning and Organizing – by William J. Rothwell, 2016.

Highly Recommended, not Compulsory

6. Interpersonal Skills in Organizations – by Ronald B. Adler and Neil Towne, 2016.
7. Communication Skills for the Workplace – by John P. Kotter, 2019.
8. Creative Problem Solving: Techniques and Resources – by William J. Rothwell, 2018.
9. Managing Workplace Harassment – by Teresa A. Daniel, 2020.
10. Planning and Organizing in the Workplace – by Robert W. Harris, 2017.
11. The 7 Habits of Highly Effective People – by Stephen R. Covey, 2013.
12. Workplace Communication: A Practical Guide – by Dan O’Hair, Mary Wiemann, and Elizabeth Mullin, 2018.
13. Crucial Conversations: Tools for Talking When Stakes Are High – by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler, 2016.

Good for Students who have Future Interests

14. The Art of Negotiation: How to Improvise Agreement in a Chaotic World – by Michael Wheeler, 2017.
15. Teamwork: What Must Go Right/What Can Go Wrong – by Carl S. Caton, 2015.
16. Managing Conflict in the Workplace – by Michael L. Diamond, 2019.
17. Emotional Intelligence at Work: How to Make Smart Decisions in a Complex World – by Steven J. Stein and Howard E. Book, 2015.

SEMESTER - VI
CORE COURSE THEORY
LEAN SIX SIGMA CONCEPTS

Course Code: 23UPTAD2C08

Marks: 100 Marks (Internal-25; External-75)

L:T:P – 2:1:0

Course Duration : 45 Hours

Credit: 03

Course Description:

The Students gain insights about the importance of lean manufacturing and practices. It helps to improve the production, eliminate the non-value-added product and works towards customer's view. This course enables the students to learn about six sigma concepts and problem-solving technique which help to improve the production, eliminate the defects and maintain to the quality in the apparel industry.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Identify the basic tools used in the lean system	Cognitive
CO2	Discuss the lean Techniques used to eliminate the waste	
CO3	Compute the Lean management Strategy for improving processes.	
CO4	Identify six sigma techniques, DMAIC and Practice the defect identification techniques and control impacts	
CO5	Outline solution for sustain the process in Six Sigma tool and techniques using control phase.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H	H	M	M	H	L		
CO2				H	H	M	M	H	L		
CO3				H	H	M	M	H	L		
CO4				H	H	M	M	H	L		
CO5				H	H	H	H	H	L		

Unit	Unit Title	Learning Chapters
I	Introduction of basic lean	What is Lean? -Principles of Lean -Benefits of Lean-History of Lean -what is Toyota Production System?What is Value added and non-value added activity
II	Lean Concept & techniques	Kaizen-GEMBA walks -5'S system- what is Kanban? pull system-types of kan-ban-hijunka - Seven Wastes in Lean-WIP - Work & Waste- Muda, Mura and Muri
III	Lean management System	JIDOCA Pillar -JIT-pillar -Poka yoke- SIPOC and Process Flow Critical to Quality (CTQ) Value Stream Mapping
IV	Concept of six sigma	History of six sigma- Hidden Factory -DMAIC Process- Voice of customer methods- Kano analysis-change acceleration process(CAP),Pareto chart
V	Sigma tools & techniques	Data collection strategy-sampling methods- As is process map, Data door analysis, Cause & Effect Diagram/ Fish Bone Diagram / Ishikawa Diagram/ Failure mode effect analysis (FMEA)-Leading indicator vs. Lagging indicator- Mistake proofs – Poka-yoke

READING LISTS AND RESOURCES

Compulsory

1. The Lean practitioners handbook, Mark Eaton,2013,U.K Womack, J. P., & Jones, D. T. (1997). Lean thinking—banish waste and create wealth in your corporation. Journal of the Operational Research Society, 48(11), 1148-1148.
2. Lean Management and Kaizen Fundamentals from Cases and Examples in Operations and Supply Chain Management By Marc Helmold · 2020
3. Womack, James P. and Roos, Daniel T. (2003); Lean Thinking; Simon and Schuster, New York
4. Lean Manufacturing Implementation in Garment Industry2013
5. Lean Tools in Apparel Manufacturing 2021
6. Lean Management Beyond Manufacturing Holistic Approach By Sanjay Bhasin · 2015
7. Betsiharris Ehrlich, —Transactional Six Sigma and Lean ServicingI, St. Lucia Press, 2002.
8. Donald W Benbow and Kubiak T M, —Certified Six Sigma Black Belt HandbookI, Pearson Education, 2007.
9. Jay Arthur, —Lean Six Sigma – DemystifiedI, Tata McGraw Hill Companies Inc, 2007.
10. James Evans and William Lindsay, —An Introduction to Six Sigma and Process ImprovementI, South-Western College, 2014

Highly Recommended, not Compulsory

11. Forrest W. BreyfogleIII ,Implementing Six Sigma: Smarter Solutions Using Statistical Methods,1999
12. Feld, W. M. (2000). Lean manufacturing: tools, techniques, and how to use them. CRC press.
13. James P. Womack , Daniel T. Jones ,Lean Thinking, Free press business,2003.
14. Forrest W. Breyfogle III, Implementing Six Sigma: Smarter solutions Using Statistical Methods, 1999.
15. Thomas Pyzdek,The Six Sigma Handbook ,McGraw-Hill, 2000
16. Michael L. George, David Rowlands, Bill Kastle ,What is Lean Six Sigma, McGraw-Hill, 2003
17. James P. Womack, Daniel T. Jones, Lean Thinking, Free press business, 2003.
18. Successfully Implementing Lean Six Sigma The Lean Six Sigma Deployment Roadmap By Keith Gardner · 2013
19. The Tactical Guide to Six Sigma Implementation By Suresh Patel · 2017
20. Paul Keller, —Six Sigma DemystifiedI, McGraw-Hill Education, 2011.
21. Howard S. Gitlow, Richard Melnyck and David M. Levine —A Guide

Good for Students who have Future Interests

22. <https://tallyfy.com/guides/lean-six-sigma/>
23. <https://www.sixsigmadaily.com/how-to-implement-six-sigma-in-an-organization/>
24. <https://www.greycampus.com/blog/quality-management/dmaic-a-six-sigma-process-improvement-methodology>
25. <https://www.reliableplant.com/Read/30141/lean-six-sigma>
26. Sustainability: Utilizing Lean Six Sigma Techniques books Tina Agustiadny, Adedeji B. Badiru · 2012
27. Lean Six Sigma in Service: Applications and Case Sandra L. Furterer · 2016

SEMESTER – VI
CORE COURSE PRACTICAL
FASHION PORTFOLIO PRESENTATION

Course Code: 23UPTAD2L08

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 1:2:0

Course Duration : 45 Hours

Credit: 03

Course Description:

This course is designed for applicants who choose to work as a traditional embroiderer, tracing specialist, hand embroiderer, or as a self-employed entrepreneur.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Ideate themes for Designing portfolio appropriate for different seasons or Occasion.	Psychomotor
CO2	Build various boards necessary for fashion portfolio.	
CO3	Develop the design by Garment Construction.	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	M	H	H	H	H	H	H	M	M		M
CO2	M	H	H	H	H	H	H	M	M		M
CO3	M	H	H	H	H	H	H	M	M		M

Unit	Unit Title	Learning Chapters
I	Planning Seasons and Occasion	The ideology of how to create a Fashion portfolio, planned for a season or occasion.
II	Preparation of boards	<ul style="list-style-type: none"> ➤ Inspirational/ Theme Board ➤ Designer Profile and Customer profile ➤ Mood/Concept page ➤ Colour Presentation Page ➤ Textile Presentation Page ➤ Flat drawing ➤ Fabric Swatch ➤ 3D wear garment ➤ Measurement Chart
III	Final presentation	➤ Number of garments in a collection 1-2 garments.

READING LISTS AND RESOURCES

Compulsory

1. Fashion Design Course Principles, Practice and Techniques: The Ultimate Guide for Aspiring Fashion Designers By Steven Faerm, 2010
2. The Academic Portfolio: A Practical Guide to Documenting V Peter Seldin, J. Elizabeth Miller, 2010
3. Fashion Portfolio Design and Presentation by Anna Kiper, 2016

Highly Recommended, not Compulsory

4. Portfolio for Fashion Designers By Kathryn Hagen, Julie Hollinger, 2012
5. Design Your Fashion Portfolio By Steven Faerm, 2012

Good for Students who have Future Interests

6. Portfolio Presentation for Fashion Designers By Linda Tain, 2018

SEMESTER – VI
QUALIFICATION PACK – III (LEVEL 6)
Sourcing Manager (AMH_Q0920_v2.0)

Course Code: 23UPTAD2Q03

Marks: 100 Marks (Assessment by NSDC)

L:T:P – 2:3:2

Course Duration : 105 Hours

Credit: 06

Course Description:

Sourcing Manager in an apparel, made-ups and home furnishing industry is primarily concerned with procurement of fabrics, trims & accessories as per design needs and/or as per sample requirements received from merchandiser. The role is supervising the functionary of purchase departments. The sourcing manager is concerned with identifying suitable suppliers for materials assessed on the basis of price, quality, reliability, time and long-term business relations. The sourcing manager must supervise all negotiations and prepare appropriate documents for same.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Outcomes	Domains of Learning
CO1	Observe organizational norms and follow green procedures at workplace.	Psychomotor & Cognitive
CO2	Plan for procurement of materials	
CO3	Procure materials from national and international suppliers related to fabrics, trims and accessories	
CO4	Supervise and evaluate performance of subordinates	
CO5	identifying Procedure for maintaining records and maintaining records for processes related to procurement	
CO6	Involves identifying environmental needs and requirement to the workplace, health and safety hazards and ensuring mechanism to safeguard against hazards	

Course Outcomes (COs)	Programme Specific Outcomes (PSOs)										
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1				H			H	H	M	M	M
CO2	H	H	H	H	H	H	H	H	H	H	L
CO3	H	H	H	H	H	H	H	H	H	H	L
CO4	H	H	H	H	H	H	H	H	H	H	L
CO5	H	H	H	H	H	H	H	H	H	H	L
CO6	H			H	H	H	H	H	H	H	L

Unit	Learning Chapters (http://sscammh.com/approvedQPNo.php)
I	Reference ID: AMH/N0104: Comply with industry, regulatory and organizational requirements and Greening of Job roles
II	Reference ID: AMH/N0920: Plan for the procurement of materials as per garment design requirements
III	Reference ID: AMH/N0921: Procure materials from national and international suppliers related to fabrics, trims and accessories
IV	Reference ID: AMH/N0922: Supervise and evaluate performance of subordinates
V	Reference ID: AMH/N0923: Maintain records about procurement of materials
VI	Reference ID: AMH/N0924: Maintain health, safety and security in the sourcing department with Gender and PwD Sensitization

READING LISTS AND RESOURCES

1. https://sscamh.com/admin/app/webroot/files/ptno/qpno1652195897AMH_Q0920_v2.0-Sourcing-Manager.pdf
2. Strategic Supply Management: Principles, Theories and Practice by Paul Cousins, Richard Lamming, Published February 1st 2008 by Prentice Hall Mastering Fashion
3. Buying and Merchandising Management Tim Jackson, David Shaw Macmillan International Higher Education, 16-Nov-2000.
4. Retail Buying Techniques: Planning, Organising and Evaluating Retail Buying Decisions and
5. Improving Profitability Fiona Elliott, Janet Rider Management Books 2000, 2003
6. Law for Retailers: The Legal Beagle Keeps You Straight with a Guide to Trading Within the Law W. H. Thomas Management Books 2000,
7. Sourcing Strategy: Principles, Policy and Designs Sudhi Seshadri, 2005
8. Retailing Tony Kent, Ogenyi Omar Macmillan Education UK, 13-Dec-2002
9. Strategic Retail Management: Text and International Cases Joachim Zentes, Dirk Morschett, Hanna Schramm-Klein Springer Science & Business Media, 16-Oct-2007

SEMESTER – VI
MINI PROJECT AND VIVA VOCE

Course Code: 23UPTAD2M06

Marks: 100 Marks (Internal-40; External-60)

L:T:P – 0:1:2

Course Duration : 45 Hours

Credit: 02

Course Description:

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

Unit	Unit Title	Learning Chapters
1.	Problem Identification	How to identify the right problem to develop innovative product development. Define the problem and its relevance to today's market/society/Industrial needs.
2.	Solution Proposed/Idea	Apply various tools and techniques to propose solution to develop innovative product idea.
3.	Uniqueness	Explain the uniqueness and distinctive features of the product How the developed product idea is different from the competitors, if any.
4.	Utility value/ Value proposition	Explain the key benefits of the innovation
5.	Scalability	Highlight the market potential (market size, segment and target) aspects of the solution or the product
6.	Economic sustainability	Emphasize the commercialization/business application aspects of the solution.
7.	Environment sustainability	Highlight environmental friendliness aspects and the related benefits of the innovation
8.	Documentation	Prepare a detailed report of (unit-1-7), with high quality photographs and develop a video of the innovative product.

SEMESTER – VI**SKILL ENHANCEMENT COURSE****INTERNSHIP/FIELD TRAINING/WORK BASED LEARNING ASSESMENT****Course Code:** 23UPTAD2I06**Marks:** 100 Marks (Internal-40; External-60)**L:T:P** – 21 Hours/Week**Course Duration** : 25-30 days**Credit:** 04**Course Description:**

The course gives a practical knowledge on using English in their corporate life. It helps to understand basic language and vocabulary skills. It also helps to pen down their present ideas and thoughts in an impressive manner. It understands a situation and leads it with critical thinking.

Course Outcomes (COs)

By the End of the Course, Students will be able to

S. No	Report List	Learning Chapters
I	Front Sheets	Letter of Undertaking, Daily Attendance Sheet, Internship Certificate
II	Overview of the Company	Brief History, Nature of Business, Types of Machineries and Equipment's used, Number of employees, Major Customers, Organizational Structure, Introduction of all the departments and their functions
III	Knowledge and Skills Gained	a. Knowledge acquired b. Skills learned c. Observed attitudes and gained values: d. The most challenging task performed:
IV	Self-Evaluation	Problem Identification Problems Identified in the Company Recommendations and Suggestions for the Problem Overview of Placement Opportunities
V	Summary	Personal Experiences Recommendations and suggestions Overview of the work based learning experience and feedback Conclusion
VI	Appendix	Samples of the work done during the internship.