

FASHION & APPAREL TECHNOLOGY

COURSE CURRICULUM

Course Code	Course	Credits	Course Type
YEAR I SEMESTER I			
FAM2001C	Basics of Clothing & Design	4 (0+4)	Major
FAM2011C	Basic Pattern Making	4 (0+4)	Major
FAE2001C	Introduction to Fashion Industry	4 (4+0)	Minor
MDC2381C	Creative Thinking	4 (1+3)	MDC
AEC2201C	Fundamentals of Communication Skills in English	2 (2+0)	AEC
SEC2461C	Computer Literacy – I	2 (1+1)	SEC
IKS2291C	Indigenous Fibres, Yarns & Fabrics	2 (1+1)	IKS
	Total	22	
YEAR I SEMESTER II			
FAM2002C	Sewing Fundamentals	4 (0+4)	Major
FAM2012C	Structural Textile Design	4 (2+2)	Major
FAE2002C	New Materials for Fashion	4 (4+0)	Minor
MDC2382C	Garment Production & Machinery	4 (2+2)	MDC
AEC2262C	Developing Communication Skills in English	2 (2+0)	AEC
SEC2552C	Computer Literacy – II	2 (1+1)	SEC
VAC2322C	Environment Science	2 (2+0)	VAC
	Total	22	

SEMESTER I

Course Code	Course Title	Credits	Course Type
FAM2001C	Basics of Clothing & Design	4 (0+4)	Major
FAM2011C	Basic Pattern Making	4 (0+4)	Major
FAE2001C	Introduction to Fashion Industry	4 (4+0)	Minor
MDC2381C	Creative Thinking	4 (1+3)	MDC
AEC2201C	Fundamentals of Communication Skills in English	2 (2+0)	AEC
SEC2461C	Computer Literacy – I	2 (1+1)	SEC
IKS2291C	Indigenous Fibres, Yarns & Fabrics	2 (1+1)	IKS
	Total	22	

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	FAM2001C BASICS OF CLOTHING & DESIGN (Major 1)			Credits / Hours per semester		4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Practical			Maximum Marks		36 Marks				
Course Outcome (CO) CO1 Introduce the basic concepts of clothing construction and design skills CO2 Understand individuality in clothing, grooming and self-care CO3 Know flat sketching through 8-head and 10-head theory CO4 Enable in making appropriate selection of clothing styles CO5 Demonstrate fabric preparation for sewing CO6 Give hands on training of basic hand and machine stitches											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Introduction to design concept 1. Design: it's meaning, types and importance 2. Elements of design: colour, texture, line, shape, pattern, space, form, plane, volume and light 3. Basic principles of design and the concept of composition: balance,			10	20	1, 2	CO1	PSO1	Skill Development	Global	Gender, Environment and Sustainability

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

	proportion, rhythm, emphasis and harmony								
II	Individuality in clothing and design 1. Grooming and care of self 2. Good taste in design: its importance and expression	5	10	1, 2	CO2	PSO1	Skill Development	Global	Gender, Environment and Sustainability
III	Flat sketching 1. 8-head theory, 10-head theory 2. Sketching design details (basic necklines, sleeves, hemlines, collars, pockets) 3. Children clothing (basic frocks, shirts, shorts) 4. Women's clothing (basics tops, skirts, dresses, trousers, jackets) 5. Men's clothing (basic shirt, trousers, jackets)	26	20	2, 3	CO3	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability
IV	Basics of design and its application 1. Identify, describe and experience the elements of design and discuss how these are a part of our daily lives 2. Review the elements and principles of design in two dimensional and three-dimensional design 3. Describe the similarities and differences in contemporary design / period design among cultures 4. Create a design composition emphasizing a design principle	19	15	2, 3	CO4	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

V	Introduction to sewing machine, preparation of fabric before cutting 1. Parts of sewing machine and its operation 2. Common stitching problems and solution 3. Fabric grain 4. Method of cutting the fabric; Checking fabric design 5. Straightening of fabric 6. Shrinking of cottons 7. Types of needles 8. Planning lay out and calculation of fabric	19	15	2, 3	CO5	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability
VI	Basic hand and machine stitches 1. Hand stitches: running stitch/basting, bast stitch, whip stitch, blanket stitch, slip stitch, blind hemming, lock stitch, tailors stitch, blind catch stitch 2. Machine seams: plain seam, pinked seam, flat seam, lapped seam, top stitched plain seam, flat fell seam, French seam, bias bound seam, overcast seam, self-bound	26	20	2, 3	CO6	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

Class work	20	Submission	Continuous assessment	Fixed date forces Continuous and Comprehensive Evaluation (CCE)	Semester Exam	20	Practical examination	Attempt the questions practically in lab	Practical skill evaluation
Mid semester examination / Lab work	20	Practical examination	Component of working with one's hand	Keep the students on the task.	Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.	Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

REFERENCES	
1.	Bennett, J. G. (2012). <i>Design Fundamentals for New Media - 2nd Edition</i> . New York: Cengage Learning.
2.	Bhatia, R., & Arora, C. (1999). <i>Introduction to Clothing and Textile</i> . Clothing and Textile Dept., Faculty of Home Science, The M.S. University of Baroda.
3.	Carson, B. (1969). <i>How You Look and Dress</i> . New Delhi: Tata McGraw-Hill Publishing Company Ltd.
4.	Corrigan, N. (2018). <i>Understanding and Using a Sewing Machine</i> . Wiltshire: The Crowood Press Ltd.
5.	Craig, H. T., & Rush, C. D. (1946). <i>Clothes with Character</i> . Boston: Heath & Company.
6.	Goldstein, H. (2012). <i>Art in everyday life</i> . New Delhi: Tata McGraw-Hill Publishing Company Ltd.
7.	Kiper, A. (2011). <i>Fashion Illustration: Inspiration and Technique</i> . Devon: David & Charles Publishers Ltd.
8.	Lauer, D. A., & Pentak, S. (2007). <i>Design Basics - 7th Edition</i> . New York: Cengage Learning.
9.	Moulton, B. (1968). <i>Simplified Tailoring</i> . London: BT Batsford Ltd.
10.	Thomas, A. J. (1996). <i>Art of Sewing</i> . New Delhi: UBJ Publication Ltd.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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11.	Pandit, S. & Tarplay, E. (1975). <i>Grooming Selection and Care of Clothes</i> . Clothing and Textile Dept., Faculty of Home Science, The M.S. University of Baroda.
12.	Pentak, S., Roth, R., & Lauer D. A. (2012). <i>Design Basics: 2D and 3D - 8th Edition</i> . New York: Cengage Learning.
13.	Scott, R. G. (1980). <i>Design fundamentals</i> . Florida: R. E. Krieger Pub. Co.
14.	Skull, J. <i>Key terms in Art Craft and Design</i> . Australia: Elbrook Press.
15.	Smuthi, G. J. (2002). <i>Elements of Fashion and Apparel Design</i> . New Delhi: New Age International Pvt. Ltd.
16.	Strutt, L. (2022). <i>Simple Hand Sewing</i> . London: CICO Books.
17.	Termes, P. E. (2014). <i>Fashion Illustration: Step by Step</i> . Spain: Konemann Publications.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	FAM2011C BASIC PATTERN MAKING (Major 2)			Credits / Hours per semester		4 (0+4) Credits /8 Hours per week (Practical: 120 hours) Total: 120 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Practical			Maximum Marks		36 Marks				
Course Outcome (CO)											
CO1 Introduce the basic concepts of anthropometry and its application											
CO2 Understand and draw the basic bodice and concepts of fit and darts											
CO3 Demonstrate dart manipulation through flat pattern method											
CO4 Understand the various parameters of fit and fall of basic skirt											
CO5 Stitch an upper garment and a skirt considering different constructional aspects											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Introduction to anthropometry 1. Body shape analysis 2. Landmarks on body and corresponding ones on dress forms 3. Terminology 4. Standard measurement techniques and its importance in fit: conventional and new 5. New methods used in anthropometric studies: advantages and limitations			18	15	2, 3, 4	CO 1	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

	6. Importance of pattern making in quality of a garment 7. Body dimensions in Indian context 8. Application of anthropometric studies in apparel industries								
II	Bodice block 1. Concept of fit: darted/dart less block 2. Basic bodice block 3. Truing of darts / seams / curves / notches / slits and its significance 4. Concepts of seam allowance and production patterns	24	20	2, 3, 4	CO 2	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability
III	Dart manipulation - flat pattern method 1. Dart manipulation techniques: pivot, slash and spread, darts in tucks/gathers 2. Darts into panels: princess lines/style lines not passing through apex point 3. Principle of fullness: importance of balancing of patterns and notches and its importance 4. Quality defect identification and remedies at pattern stage	24	20	2, 3, 4	CO 3	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability
IV	Skirt 1. Basic skirt block 2. Various silhouette of skirts and their differences 3. Concept of panels/pleats	24	20	2, 3, 4	CO 4	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

	4. Various parameters controlling fit and fall of skirts								
V	Construction of garment 1. Upper garment (any one) 2. Skirt (any one) 3. Different constructional aspects: garment finishing (neckline, armhole, waistbands, facings)	30	25	2, 3, 4, 6	CO 5	PSO1	Employability, Skill Development	Global	Gender, Environment and Sustainability

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	20	Submission	Continuous assessment	Fixed date forces Continuous and Comprehensive Evaluation (CCE)	Semester Exam	20	Practical examination	Attempt the questions practically in lab	Practical skill evaluation
Mid semester examination, Lab work	20	Practical examination	Component of working with one's hand	Keep the students on the task.	Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.	Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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REFERENCES	
1.	Al-Haboui, M. H. (1992). <i>Anthropometry for a Mix of Different Populations</i> . Amsterdam: Applied Ergonomics, Elsevier.
2.	Aldrich, W. (2015). <i>Metric Pattern Cutting for Women's Wear - 6th Edition</i> . New York: Wiley-VCH GmbH & Co.
3.	Armstrong, H. J. (2009). <i>Pattern making for Fashion design – 5th Edition</i> . Noida: Harper Collins Publishers India.
4.	Basia, S. (2010). <i>Technical Drawing for Fashion</i> . London: Laurence King Publishing.
5.	Lynne, J. & Fairbanks, M. (2018). <i>Pattern Design Fundamentals – Creative Pattern Drafting and Construction</i> . Fairbanks Publishing, LLC.
6.	Reich, N., & Goldserry, E. (1993). <i>Development of body measurement tables for women 55 and older and the relationship to ready-to-wear garment size</i> . (Research Technical Report Number PCN 33-000006-18, ISR 06). Philadelphia: American Society for Testing and Materials/Institute for Standards Research.
7.	Shoben, M. M., & Ward, J. P. (1990). <i>Pattern Cutting and Making Up – Revised Edition</i> . Oxford: Butterworth Heinmann.
8.	Suhner, I. A. (2012). <i>Technical Drawing for Fashion Design: Garment Source Book</i> . Netherlands: The Pepin Press.
9.	Tokomo, N. (2011). <i>Pattern Magic: Stretch Fabrics</i> . Tokyo: Nakamichi Laurence King Publications.
10.	Zakaria, N. & Gupta, D. (2020). <i>Anthropometry, Apparel Sizing and Design – Second Edition</i> . Singapore: Springer.
11.	Zarapkar, K. R. (2008). <i>Zarapkar System of Cutting</i> . Mumbai: Navneet Publication (India) Ltd.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5										
Year	I	F AE2001C INTRODUCTION TO FASHION INDUSTRY (Minor 1)	Credits / Hours per semester		4 (4+0) Credits /4 Hours per week (Theory: 60 hours) Total: 60 hours/semester					
Semester	I	Year of Introduction: 2023-24	Maximum Marks / Grade		100 Marks / O Grade (10-point scale)					
Mode of Transaction		Lecture	Maximum Marks		36 Marks					
Course Outcome (CO)										
CO1 Make students aware about the fundamentals of textiles processes										
CO2 Understand the basic sequence of apparel manufacturing process										
CO3 Study about the various concepts of fashion and its development										
CO4 Inculcate the knowledge of merchandising, retailing and branding										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY										
I	Fundamentals of textiles 1. Textile terminologies 2. Classification of fibres 3. Yarn spinning process and its types 4. Different types of fabric and their end use 5. Fabric pre-treatment 6. Introduction to dyeing, printing and finishing		12	20	1, 2, 3	CO1	PSO2 PSO3	Skill Development	Global	Environment and Sustainability
II	Apparel manufacturing 1. Apparel terminologies		21	35	1, 2, 3	CO2	PSO2 PSO3	Skill Development	Global	Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

	2. Process of apparel manufacturing 3. Types of manufacturing methods. apparel supply chain 4. Understanding of garment components (Kids-wear, Men's-wear and Women's wear)								
III	Fashion concepts 1. Fashion – an overview and definitions 2. Fashion cycle and categorization 3. Fashion centres 4. History of apparel manufacturing 5. Categorization of apparels	12	20	1, 2, 3	CO3	PSO2 PSO3	Skill Development	Global	Gender, Environment and Sustainability
IV	Business of fashion 1. Merchandising - Merchandising definitions, roles of merchandisers in buying offices and manufacturing / exporting units 2. Retailing - Various types of retailers, franchise retailing, private labels and others, department stores, specialty stores, chain retailer, mail order houses 3. Shopping malls 4. Branding – Definition, types of brands, brand life cycle	15	25	1, 2, 3	CO4	PSO2 PSO3	Skill Development	Global	Gender, Environment and Sustainability

SUGGESTED EVALUATION	
CCE (50% IA)	SEE (50% UA)

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written Mode	Traditionally essay type	For depth and planned preparation
Class test	15	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Quizzes/Objective test	10	Written mode	Short duration structured test	Excellent validity as greater syllabus coverage.					
Total	50				Total	50			

REFERENCES	
1.	Carr, H. & Latham, B. (2008). <i>Technology of Clothing Manufacture - 4th Edition</i> . Oxford: Blackwell Publishing.
2.	Gohl, E., & Vilensky, L. (1993). <i>Textile Science: An Explanation to Fiber Properties</i> . Melbourne: Longman Cheshire.
3.	Kendall, G. (2009). <i>Fashion Brand Merchandising</i> . New York: Fairchild Books.
4.	Glock, R., & Kunz, G. (2005). <i>Apparel Manufacturing: Sewn Product Analysis</i> – Fourth ed. New Delhi: Pearson India Ltd.
5.	Nayak, R., & Padhye, P. (2015). <i>Garment Manufacturing Technology</i> . London: Woodhead Publishing.
6.	Dickerson, K. (2002). <i>Inside the Fashion Business – 7th ed</i> . New Jersey – Prentice Hall.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	MDC2381C CREATIVE THINKING (Multi-disciplinary Course 1)			Credits / Hours per semester		4 (1+3) Credits / 7 Hours per week (Theory: 15 hours Practical: 90 hours) Total: 105 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture and Practical			Maximum Marks		36 Marks				
Course Outcome (CO) CO1 Introduce the basic concepts of thinking and creativity CO2 Impart basic understanding of the tools required for creative thinking CO3 Enhance problem solving ability through creative process CO4 Enable students to develop distinguished approach towards environment and hence helping derive inspirations through creative expressions CO5 Demonstrate product designing through creative expression											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Introduction to thinking and creativity 1. Defining thinking and creativity 2. Elements and principles of thinking and creativity 3. Forms of thinking and creativity 4. Roots of creativity: biological, mental, social, spiritual			5	10	1, 2	CO1	PSO5	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability, Human Values

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

II	Creativity tool kit and process 1. Tools and techniques of creativity: linear, intuitive and group 2. Blocks to creativity: perceptual, cultural and environmental, emotional, intellectual 3. Lateral thinking: principles, uses and training	10	20	1, 2	CO2	PSO5	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability, Human Values
PRACTICAL									
III	Creative process 1. Steps to creative process: specific needs and demands of consumers 2. Study of different fabric textures in relation to end use 3. Creative solutions to address emergence of problems and issues arising in the garment unit 4. Designing for optimum utilization of damaged/seconds fabric after processes 5. Creative presentation of rejected products 6. Creative solutions to recycle/reduce/reuse waste from cutting and production departments of the garment unit 7. Innovative ideas to product designing: spools, bobbins, fasteners, trims, fabrics and like	25	20	1, 2, 3	CO3	PSO5	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability, Human Values

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

	8. Accessory design: coordinated accessories: neckties, bags, hats, jewellery								
IV	Creative expression through illustrations 1. Using different forms of perspective to show the illusion of depth on a two-dimensional surface 2. Illustrating folds of different types of fabric with pencil sketching with respect to light source	33	25	2, 3, 4	CO4	PSO5	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability, Human Values
V	Practical: Creative expression: 1. Create a series of artworks that express a personal statement demonstrating skill in applying the elements of art and the principles of design 2. Accessory designing: coordinated accessories 3. Product designing: utilizing spools, bobbins, fasteners, trims, fabrics.	32	25	2, 3, 4	CO5	PSO5	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability, Human Values

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Lab work	25	Practical	Component of working with one's hand	Keep the students on the task.	Lab work	15	Practical	Component of working with one's hand	Keep the students on the task.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

Craft work	15	Practical	Component of working with one's hand	Encourage application of concepts learnt.	Craft work	10	Practical	Component of working with one's hand	Encourage application of concepts learnt.
Quiz	10	Oral	Small group of 2-5 members work on a joint task	Assess memory power.	Viva/Oral examination	25	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

REFERENCES	
1.	Adair, J. (2009). The Art of Creative Thinking: How to Be Innovative and Develop Great Ideas, Edition reprint. UK: Kogan Page Publishers.
2.	Aristotle (2021). <i>How to Innovate: An Ancient Guide to Creative Thinking</i> . New Jersey: Princeton University Press.
3.	Balaram, S. (2011). Thinking Design, National Institute of Design. New Delhi: Sage Publications.
4.	Brown, S. (2013). Refashioned: Cutting Edge Clothing from Upcycled Material, UK: Laurence King Publishing Ltd.
5.	Bubonia, J. E. (2014). Apparel Production Terms and Processes. New York: Bloomsbury.
6.	Carr, H. and Latham, B. (2008). Technology of Clothing Manufacture. Edited by David J. Tyler, 4th ed. Oxford: Blackwell.
7.	Clive Hallet, Amanda Johnston. (2010). Fabric for Fashion- a comprehensive guide to natural fibers. London: Laurence King Publishing Ltd.
8.	Griffiths, C. (2022). <i>The Creative Thinking Handbook: Your Step-by-step Guide to Problem Solving in Business</i> . London: Kogan Page.
9.	Guy, C., Bill, L. (2007). The Creative Thinking Plan: How to Generate Ideas and Solve Problems in Your Work and Life, Edition revised. Great Britain: Financial Times/Prentice Hall.
10.	Jennings, T. (2011). Creativity in fashion design- An inspiration workbook. USA: Fairchild Books.
11.	Lau, J. Y. F. (2011). An Introduction to Critical Thinking and Creativity: Think More, Think Better. New Jersey: John Wiley & Sons.
12.	O'Day, R. (2010). Creative Thinking, Edition reprint. US: Kessinger Publishing.
13.	The ICFAI University (2004). Creativity, Hyderabad: ICFAI University.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

14.	Waxen, W. (2020). <i>Our Minds Iced-up When it Comes to Creative Thinking</i> . White Supremacy.
15.	Worsely, H. (2011). 100 Ideas that changed fashion. London: Laurence King Publishing Ltd.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	IKS2291C INDIGENOUS FIBRES, YARNS & FABRICS (Indian Knowledge System Course 1)			Credits / Hours per semester		2 (1+1) Credits / 3 Hours per week (Theory: 15 hours Practical: 30 hours) Total: 45 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		50 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture and Practical			Maximum Marks		18 Marks				
Course Outcome (CO)											
CO1 Understand the basic terminologies related to textiles and their classification											
CO2 Impart basic understanding of fibres, their properties and end use applications											
CO3 Enlighten about the different yarns used in apparel manufacturing											
CO4 Give an overview of the minor fibres and conventional methods of manufacturing yarns											
CO5 Understand the basic terminologies related to fabrics											
CO6 Study the properties of fabrics and their applications											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Introduction to textiles and fibres 1. Key terms related to textiles 2. Primary and secondary properties of fibres 3. Classification of fibres and their end uses; Properties and end uses of textile fibres 4. Manufacturing of manmade fibres			6	20	1, 2	CO1 CO2	PSO3	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	5. Comparison between natural and manmade fibres. 6. Minor Fibres: Extraction, Properties and end uses.								
II	Yarn classification and manufacture 1. Classification of yarn 2. Properties of yarns and end uses 3. Conventional methods of manufacturing yarns 4. Modern methods of yarn manufacturing 5. Carbon footprint of modern yarn manufacturing methods 6. Texturising	4	15	1, 2	CO3 CO4	PSO3	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability
III	Basics of fabric manufacturing 1. Basic terminologies related to weaving, knitting and nonwovens 2. Properties and end use applications of woven, knitted and nonwoven fabrics 3. Basic woven and knitted structures and their applications	5	15	1, 2	CO5 CO6	PSO3	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability
PRACTICAL									
IV	Fibre Identification 1. Identification of textile fibres 2. Non-technical test: feeling test, burning test 3. Technical test: microscope test and chemical test	30	50	1, 2, 3	CO3	PSO3	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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4. Identification and application of yarns and fabrics.									
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	10	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	25	Written Mode	Traditionally essay type	For depth and planned preparation
Class test	10	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Lab Work	5	Practical	Component of working with one's hand	Keep the students on the task.					
Total	25				Total	25			

REFERENCES	
1.	Albrecht, W., Fuchs, H., & Kittelmann, W. (2003). <i>Nonwoven Fabrics</i> . New Jersey: Wiley-VCH GmbH & Co.
2.	Gohl, E., & Vilensky, L. (1993). <i>Textile Science: An Explanation to Fiber Properties</i> . Melbourne: Longman Cheshire.
3.	Gokerneshan, N. (2004). <i>Fabric Structure and Design</i> . New Delhi: New Age International Pvt. Ltd.
4.	Goswami, B. C. (2004). <i>Textile Sizing</i> . New York: Marcel Dekker Inc.
5.	Horrocks, A. R. & Anand, S. C. (2000). <i>Handbook of Technical Textiles</i> . New Delhi: Woodhead Publishing Ltd.
6.	Militky, J. et al. (2023). <i>Fibrous Structures and Their Impact on Textile Design</i> . Singapore: Springer.
7.	Kadolph, S. J. & Langford, A. L. (2006). <i>Textiles – 10th Edition</i> . New Jersey: Prentice Hall.
8.	Lawrence, C. (2003). <i>Fundamentals of Spun Yarn Technology</i> . New York: CRC Press LLC.
9.	Rahman, M. et al. (2023). <i>Advanced Technology in Textiles: Fibre to Apparel</i> . Singapore: Springer.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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10.	Rangappa, S. et al. (2022). <i>Advances in Bio-based Fiber: Moving Towards a Green Society</i> . New Delhi: Woodhead Publishing Ltd.
11.	Reddy, N. (2020). <i>Silk: Materials, Processes, and Applications</i> . New Delhi: Woodhead Publishing Ltd.
12.	Saville, B. P. (2000). <i>Physical Testing of Textiles</i> . New York: CRC Press LLC.
13.	Spencer, D. J. (2001). <i>Knitting Technology: A Comprehensive Handbook and Practical Guide</i> . New Delhi: Woodhead Publishing Ltd.

SEMESTER II

Course Code	Course Title	Credits	Course Type
FAM2002C	Sewing Fundamentals	4 (0+4)	Major
FAM2012C	Structural Textile Design	4 (2+2)	Major
FAE2002C	New Materials for Fashion	4 (4+0)	Minor
MDC2382C	Garment Production & Machinery	4 (2+2)	MDC
AEC2262C	Developing Communication Skills in English	2 (2+0)	AEC
SEC2552C	Computer Literacy – II	2 (1+1)	SEC
VAC2322C	Environment Science	2 (2+0)	VAC
	Total	22	

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	FAM2002C SEWING FUNDAMENTALS (Major 3)			Credits / Hours per semester		4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Practical			Maximum Marks		36 Marks				
Course Outcome (CO)											
CO1 Introduce sewing preparatory processes like marker planning, spreading and cutting											
CO2 Develop an understanding of various defects in a sewing machine and its rectification through proper selection of needle and thread											
CO3 Understand the importance of fabric grain, layout & use of various finishing techniques, hems, seams, etc.											
CO4 Demonstrate pattern drafting and stitching of kids wear											
CO5 Understand post sewing operations like finishing, pressing and packaging											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Fabric spreading, marker making and cutting 1. Spreading of fabric: methods of laying - nap one way, nap either way, symmetry, fabric grain, face and back side			12	10	2, 3	CO1	PSO2	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	2. Marker: preparation and placement of marker (stripes, checks, one way and two-way designs) 3. Cutting								
II	Compatibility of sewing needle and sewing thread in relation with other sewing parameters 1. Correlation between sewing thread and fabric and its impact to stitch performance 2. Controlling stitch performance and quality and minimizing of defect occurrence	12	10	2, 3	CO2	PSO2	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability
III	Design features 1. Seams for different types of fabrics correlating with types of needles and threads 2. Types of tucks - basic, pin, shell, corded 3. Different types of pleats and gathers 4. Calculation of fabrics - various styles and age groups 5. Neckline finishes: importance of stay stitching, importance of notches and slits / clippings, facing and bias facing, bias binding, French binding 6. Plackets / pockets: two-piece placket / kurta placket, continuous placket, patch, welt / bound, in-seam	48	40	2, 3, 6	CO3	PSO2	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment and Sustainability

 सत्यं विद्मं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	7. Types of waistbands 8. Type of fasteners: buttons / button hole, press button, hook / eye, velcro, zipper, centered, lapped, concealed 9. Types of cuffs 10. Binding edges: inside corner, outside corner 11. Type of collars; Peter pan, collar with V-neck, mandarin, shirt collar, roll collar								
IV	Child's basic block and sleeve 1. Standard body measurements 2. Garments: baby pants - ruffles, elastic waist, run and fell seam, bias facing 3. 'A' line frock - Peter pan collar and puffed sleeve, patch pocket	36	30	2, 3, 6	CO4	PSO2	Employability, Entrepreneurship, Skill Development		Gender, Environment and Sustainability
V	Post sewing procedures 1. Techniques, processes and equipment in finishing 2. Introduction to ironing, pressing, finishing equipment 3. Selection of machinery and techniques in relation to style, fabrics and customers' demands under pressing, molding 4. Elements of pressing - hand irons, buck presser, steam, blowing, foam finisher, steam electric iron,	12	10	2, 3, 6	CO5	PSO2	Employability, Entrepreneurship, Skill Development		Gender, Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	thermostat, buck padding, zero pressure point, carousel press, steam tunnel, steam dolly 5. Spotting chemicals, packing, pressing, shrinkage.								
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Semester Exam	20	Practical examination	Attempt the questions practically in lab	Practical skill evaluation
Mid semester examination, Lab work	20	Practical examination	Component of working with one's hand	Keep the students on the task.	Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.	Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

REFERENCES	
1.	Aldrich, W. (2015). <i>Metric Pattern Cutting for Women's Wear - 6th Edition</i> . New York: Wiley-VCH GmbH & Co.
2.	Crawford, C. A. (1993). <i>Fashion your Own Skirts the Simple Way</i> . New Delhi: Bloomsbury Publishing India Ltd.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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3.	Corrigan, N. (2018). <i>Understanding and Using a Sewing Machine</i> . Wiltshire: The Crowood Press Ltd.
4.	Gardiner, W. (2022). <i>Complete Book of Sewing Techniques – New Second Edition</i> . Mount Joy: Landauer Publishing.
5.	Juvekar, V. B. (1953). <i>Easy Cutting</i> . Mumbai: Ball Co.
6.	Moulton, B. (1968). <i>Simplified Tailoring</i> . London: BT Batsford Ltd.
7.	Pandit, S. (1967). <i>A Manual of Children's Clothing</i> . Mumbai: Orient Longmans Limited.
8.	Singer. (1989). <i>Sewing Pants that Fit</i> . Minnesota: Cowles Creative Publishing Inc.
9.	Solinger, J. (1988). <i>Apparel Manufacturing Handbook- Analysis, Principles and Practice</i> . South Carolina: Bobbin Blenheim Media Corp.
10.	Thomas, A. J. (1996). <i>Art of Sewing</i> . New Delhi: UBJ Publication Ltd.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	FAM2012C STRUCTURAL TEXTILE DESIGN (Major 4)			Credits / Hours per semester		4 (2+2) Credits / 6 Hours per week (Theory: 30 hours Practical: 60 hours) Total: 90 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Theory and Practical			Maximum Marks		36 Marks				
Course Outcome (CO) CO1 Gain an understanding of woven fabric manufacturing process, different types of weaves, their properties and applications CO2 Impart basic knowledge regarding knitted fabric, different types of knitted structures, their properties and end uses CO3 Understand manufacturing of nonwoven fabrics and their applications with respect to the apparel industry CO4 Get hands on practice of woven fabric manufacturing CO5 Demonstrate knitted and nonwoven fabric manufacturing process											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Woven fabrics 1. Introduction to weaving 2. Methods of weaving: cardboard weaving, card weaving, frame weaving, loom weaving 3. Weaving preparatory processes 4. Loom and its parts 5. Preparation of the loom			12	20	1, 2	CO1	PSO3	Employability, Skill Development	Global	Environment and Sustainability

 सत्यं विदुषं सुखम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

	6. Handloom, power loom and automatic loom including dobby and jacquard attachments 7. Basic weaves and their variations 8. Designation on point paper								
II	Knitted fabrics 1. Introduction to knitting 2. Knit vocabulary 3. Difference between knitted and woven fabrics 4. Warp and weft knitting 5. Different types of knitting needles 6. Properties and applications of plain, rib, interlock and purl knit structures	12	20	1, 2	CO2	PSO3	Employability, Skill Development	Global	Environment and Sustainability
III	Non-woven fabrics 1. Introduction 2. Web formation: carding, air laying, wet laying, spun bond, melt blown 3. Web bonding: mechanical, chemical and thermal 4. Finishing of nonwoven: classification, applications 5. Application of nonwoven in garments	6	10	1, 2	CO3	PSO3	Employability, Skill Development	Global	Environment and Sustainability
PRACTICAL									
IV	Woven samples 1. Preparation of samples by cardboard weaving technique	48	40	2, 3, 6	CO4	PSO3	Employability, Skill Development		Environment and Sustainability

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

	2. Preparation of samples of three basic weaves and their variation on the loom and product preparation								
V	Knitted and nonwoven 1. Visits to knitting and non-woven manufacturing units	12	10	2, 3, 4	CO5	PSO3	Employability, Skill Development		Environment and Sustainability

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written Mode	Traditionally essay type	For depth and planned preparation
Lab Work	25	Practical	Component of working with one's hand	Keep the students on the task.					
Total	50				Total	50			

REFERENCES	
1.	Ajgaonkar, D. B. (1998). <i>Principles of Knitting</i> . California: Universal Publishing Corporation.
2.	Albrecht, W., Fuchs, H., & Kittelmann, W. (2003). <i>Nonwoven Fabrics</i> . New Jersey: Wiley-VCH GmbH & Co.
3.	Corbmann, B. P. (1986). <i>Textiles: Fibre to Fabric</i> . New York: McGraw Hills Inc.
4.	Gandhi, K. (2020). <i>Woven Textiles: Principles, Technologies and Applications – Second Edition</i> . New Delhi: Woodhead Publishing Ltd.
5.	Gokerneshan, N. (2004). <i>Fabric Structure and Design</i> . New Delhi: New Age International Pvt. Ltd.
6.	Goswami, B. C. (2004). <i>Textile Sizing</i> . New York: Marcel Dekker Inc.
7.	Grosicki, Z. J. (1921). <i>Watson's Textile Design and Colour</i> . New Delhi: Woodhead Publishing Ltd.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

8.	Horrocks, A. R. & Anand, S. C. (2000). <i>Handbook of Technical Textiles</i> . New Delhi: Woodhead Publishing Ltd.
9.	Mazza, C. & Zonda, P. (2003). <i>Textile Reference Book for Knitting</i> . Italy: ACIMIT.
10.	Muthu, S. et. al. (2019). <i>Energy Footprints of the Food and Textile Sectors</i> . Singapore: Springer.
11.	Nisbet, H. (1919). <i>Grammar of Textile Design</i> . London: Greenwood & Sons.
12.	Spencer, D. J. (2001). <i>Knitting Technology: A Comprehensive Handbook and Practical Guide</i> . New Delhi: Woodhead Publishing Ltd.
13.	Talukdar, M. K. (1998). <i>Weaving: Machines, Mechanisms, Management</i> . Ahmedabad: Mahajan Publishers.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5										
Year	I	FAE2002C NEW MATERIALS FOR FASHION (Minor 2)	Credits / Hours per semester		4 (4+0) Credits / 4 Hours per week (Theory: 60 hours) Total: 60 hours/semester					
Semester	I	Year of Introduction: 2023-24	Maximum Marks / Grade		100 Marks / O Grade (10-point scale)					
Mode of Transaction		Lecture	Maximum Marks		36 Marks					
Course Outcome (CO)										
CO1 Impart knowledge regarding existing trends related to fabrics, fasteners and other materials.										
CO2 Enable students to use fabrics, accessories and related materials for innovative application to apparels.										
CO3 Study new materials suitable for avant-garde fashion or innovative fashion.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY										
I	New trends in fashion materials 1. Terms and terminologies 2. Types of textures in materials 3. Materials suitable for haute couture 4. Recent trends in: fabrics, closures and fasteners – buttons, buttonholes, zippers, hooks, drawstrings and ties, others, trims – braids, cords, fringes, laces, rickrack’s, strings, tapes, ribbons, piping, others, surface embellishment – appliqué, beads and sequences, embossing, embroidery,		15	25	1, 2	CO1	PSO4	Skill Development	Global	Gender, Environment and Sustainability, Human Values

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

	rhinestones, printing, others; Their applications 5. Forecasting of materials 6. Trends, shifts, fashion 7. Innovations in materials with technological advancements 8. Materials vs end use								
II	Understanding apparel market 1. Market survey of trends in fabrics, trims and accessories 2. Sourcing: types, market, cost, fabrics, closures and fasteners – buttons, buttonholes, zippers, hooks, drawstrings and ties, others, trims – ribbons, rickrack, braids, cords, fringes, laces, strings, tapes, piping, others, surface embellishments – appliqué, beads and sequences, embossing, embroidery, rhinestones, printing, others	15	25	1, 2	CO1	PSO4	Skill Development	Global	Gender, Environment and Sustainability, Human Values
III	Alternate methods of fabric joining 1. Purpose, methods, advantages and disadvantages of faggoting, fusing, welding and moulding	12	20	1, 2	CO2	PSO4	Skill Development	Global	Gender, Environment and Sustainability, Human Values
IV	Case study 1. Haute couture designers and recent fashion weeks	18	30	3, 4, 5	CO3	PSO4	Skill Development	Global	Gender, Environment and Sustainability, Human Values

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written Mode	Traditionally essay type	For depth and planned preparation
Class test	15	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Quizzes/Objective test	10	Written mode	Short duration structured test	Excellent validity as greater syllabus coverage.					
Total	50				Total	50			

REFERENCES	
1.	Adair, J. (2009). <i>The Art of Creative Thinking: How to Be Innovative and Develop Great Ideas</i> , Edition reprint. UK: Kogan Page Publishers.
2.	Balaram, S. (2011). <i>Thinking Design</i> , National Institute of Design. New Delhi: Sage Publications.
3.	Brown, S. (2013). <i>Refashioned: Cutting Edge Clothing from Upcycled Material</i> , UK: Laurence King Publishing Ltd.
4.	Bubonia, J. E. (2014). <i>Apparel Production Terms and Processes</i> . New york: Bloomsbury.
5.	Carr, H. and Latham, B. (2008). <i>Technology of Clothing Manufacture</i> . Edited by David J. Tyler, 4th edn. Oxford: Blackwell.
6.	Clive Hallet, Amanda Johnston. (2010). <i>Fabric for Fashion- a comprehensive guide to natural fibers</i> . London: Laurence King Publishing Ltd.
7.	Guy, C., Bill, L. (2007). <i>The Creative Thinking Plan: How to Generate Ideas and Solve Problems in Your Work and Life</i> , Edition revised. Great Britain: Financial Times/Prentice Hall.
8.	Jennings, T. (2011). <i>Creativity in fashion design- An inspiration workbook</i> . USA: Faichlid Books.
9.	Lau, J. Y. F. (2011). <i>An Introduction to Critical Thinking and Creativity: Think More, Think Better</i> . New Jersey: John Wiley & Sons.
10.	O'Day, R. (2010). <i>Creative Thinking</i> , Edition reprint. US: Kessinger Publishing.
11.	Worsely, H. (2011). <i>100 Ideas that changed fashion</i> . London: Laurence King Publishing Ltd.

 सत्यं विदितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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12.	The ICFAI University (2004). <i>Creativity</i> , Hyderabad: ICFAI University.
13.	http://www.brainstorming.co.uk/tutorials/creativethinking.html
14.	Fashion Magazine: Vogue, Elle, Harper's Bazaar, Cosmopolitan, Grazia, GQ, etc.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology First Year – Level 4.5											
Year	I	MDC2382C GARMENT PRODUCTION & MACHINERY (Major 4)				Credits / Hours per semester		4 (2+2) Credits / 6 Hours per week (Theory: 30 hours Practical: 60 hours) Total: 90 hours/semester			
Semester	II	Year of Introduction: 2023-24				Maximum Marks / Grade		100 Marks / O Grade (10-point scale)			
Mode of Transaction		Theory and Practical				Maximum Marks		36 Marks			
Course Outcome (CO)											
CO1 Enable the students to understand the mass production technical knowhow in a readymade garment manufacturing unit											
CO2 Inculcate understanding regarding the various types of machines and its accessories used for apparel manufacturing in bulk											
CO3 Expose the students to the latest practices and technological world of garment production											
CO4 Enable the students to select appropriate machinery for the production of the required production line in a readymade garment unit											
CO5 Develop practical understanding regarding different ways to overcome problems during the process											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Marker planning, spreading and cutting 1. Marker planning: planning, drawing and reproducing the marker, requirements of marker planning, maximizing marker utilization, methods of marker planning			12	20	1, 2	CO1	PSO1 PSO2	Skill Development	Global	Environment and Sustainability, Professional Ethics

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	2. Spreading: spreading the fabric, requirements of the spreading process, methods of spreading 3. Cutting: objectives of cutting, methods of cutting, preparation of cut work for the sewing room								
II	Sewing 1. Seam types 2. Stitch types 3. Sewing machine feed mechanisms 4. Sewing machine needles 5. Sewing threads 6. Classification of sewing machines 7. Basic sewing machine shapes and associated work aids 8. Automatic machines	12	20	1, 2	CO2	PSO1 PSO2	Skill Development	Global	Environment and Sustainability, Professional Ethics
III	Alternative methods of joining materials 1. Fusing: advantages of using fusible interlinings, requirements of fusing, fusing process, factors affecting fusing, fusing equipment, methods of fusing, quality control in fusing 2. Welding and adhesives	6	10	1, 2	CO3	PSO1 PSO2	Skill Development	Global	Environment and Sustainability, Professional Ethics
PRACTICAL									
IV	Demonstration 1. Demonstration of marker planning and spreading, cut-order plan preparation, identification of sewing	48	40	2, 3, 5	CO4	PSO1 PSO2	Employability, Skill Development	Global	Environment and Sustainability, Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	machine parts, preparing a log book of various sewing machine attachments, demonstration of threading on different sewing machines 2. Identification of seams and stitches.								
V	Troubleshooting 1. Troubleshooting in the cutting and sewing room	12	10	2, 3, 4	CO5	PSO1 PSO2	Employability, Skill Development	Global	Environment and Sustainability, Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written Mode	Traditionally essay type	For depth and planned preparation
Quizzes/Objective test	10	Written mode	Short duration structured test	Excellent validity as greater syllabus coverage.					
Lab Work	15	Practical	Component of working with one's hand	Keep the students on the task.					
Total	50				Total	50			

REFERENCES	
1.	Bheda, R. (2003). <i>Managing Productivity in the Apparel Industry</i> . New Delhi: CBS Publishers & Distributors.
2.	Carr, H. & Latham, B. (2008). <i>Technology of Clothing Manufacture - 4th Edition</i> . Oxford: Blackwell Publishing.
3.	Chuter, A. J. (1995). <i>Introduction to Clothing Production Management - 2nd Edition</i> . Oxford: Blackwell Publishing.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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4.	Cooklin, G. (1997). <i>Garment Technology for Fashion Designers</i> . New Delhi: Wiley India Pvt. Ltd.
5.	Fan, J., & Hunter, L. (2009). <i>Engineering Apparel Fabrics and Garments</i> . New Delhi: Woodhead Publishing Pvt. Ltd.
6.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.
7.	Jones, I., & Stylios, G., K. (2013). <i>Joining Textiles: Principles and Applications</i> . New Delhi: Woodhead Publishing Pvt. Ltd.
8.	Rathinamoorthy, R., & Surjit, R. (2015). <i>Apparel Machinery and Equipments</i> . New Delhi: Woodhead Publishing Pvt. Ltd.
9.	Solinger, J. (1988). <i>Apparel Manufacturing Handbook- Analysis, Principles and Practice</i> . South Carolina: Bobbin Blenheim Media Corp.
10.	Nayak, R., & Padhye, P. (2015). <i>Garment Manufacturing Technology</i> . London: Woodhead Publishing.

 सत्यं जितं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Second Year

 सत्यं विद्मं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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PROGRAMME SPECIFIC OUTCOMES

SECOND YEAR (LEVEL 5.0)

- PSO 1 Acquire technical knowhow of sewing kid's, women's and men's clothing along with technical and sustainable aspects of mass production.
- PSO 2 Appreciate the concepts of advanced pattern making, anthropometry, sizing and grading and their applications in apparel industry.
- PSO 3 Impart technical skills in computers, designing software, CAD and information technology.
- PSO 4 Deliver multidisciplinary knowledge about the intellectual property rights to enhance the overall growth and development in apparel sector.
- PSO 5 Inculcate acute awareness of the current trends and commercial aspects of sourcing, costing and international trade.
- PSO 6 Understand the various aspects of processing, finishing and packaging of various textile materials.
- PSO 7 Prepare globally competitive industry ready graduates by imparting training and experiential learning through internships.
- PSO 8 Enhance proficiency over visual and digital communication skills for professional advancement and employability.

Bloom's Taxonomy (BT) Levels: 1. Remember 2. Understand 3. Application 4. Analysis 5. Evaluation 6. Creation

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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COURSE CURRICULUM

Course Code	Course	Credits	Course Type
YEAR II SEMESTER I			
FAM2003C	Kid's & Women's Wear	4 (0+4)	Major
FAM2013C	Advanced Pattern Making	4 (0+4)	Major
FAM2023C	Anthropometry, Sizing & Grading	4 (0+4)	Major
MDC2343C	Intellectual Property Rights	4 (4+0)	MDC
AEC2183C	English for Entrepreneurship	2 (2+0)	AEC
SEC2273C	International Trade Practices	2 (2+0)	SEC
IKS2133C	Sustainable Apparel Production	2 (2+0)	IKS
	Total	22	
YEAR II SEMESTER II			
FAM2004C	Men's Wear	4 (0+4)	Major
FAM2014C	Computer Aided Pattern Designing & Development	4 (0+4)	Major
FAM2024C	Processing & Packaging in Apparel Industry	4 (2+2)	Major
FAE2004C	Budgeting & Costing in Apparel Industry	4 (4+0)	Minor
AEC2184C	English for Digital & Virtual Communication	2 (2+0)	AEC
SEC2264C	Global Sourcing	2 (2+0)	SEC
VAC2244C	Finishing Technology	2 (1+1)	VAC
	Total	22	

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SEMESTER I

Course Code	Course Title	Credits	Course Type
FAM2003C	Kid's & Women's Wear	4 (0+4)	Major
FAM2013C	Advanced Pattern Making	4 (0+4)	Major
FAM2023C	Anthropometry, Sizing & Grading	4 (0+4)	Major
MDC2343C	Intellectual Property Rights	4 (4+0)	MDC
AEC2183C	English for Entrepreneurship	2 (2+0)	AEC
SEC2273C	International Trade Practices	2 (2+0)	SEC
IKS2133C	Sustainable Apparel Production	2 (2+0)	IKS
	Total	22	

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	KID’S AND WOMEN’S WEAR (Major 5)			Credits / Hours per semester		4 (0+4) Credits / Hours per week (Practical: 120 hours) Total: 120 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Practical			Minimum Marks		36 Marks				
Course Outcome (CO) CO1 The students shall understand the different sewing machines used in apparel industry. CO2 The students will gain fundamental knowledge about various terms used in kid’s and women’s fashion. CO3 Develop ability to construct garments by incorporating various garment construction techniques for women’s and kid’s wear. CO4 The students will inculcate understanding regarding operational breakdown and preparation of spec sheet.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Introduction to Industrial and Specialized Sewing Machine 1. Basic sewing machine: Presser Foot, Throat Plate, Presser spring, Needle bar, take up Lever, Tension Device, Take up Spring, Thread guides, Bobbin & Bobbin case, Feed Dog, Stitch Regulator, Back Tack Lever, Needle. 2. Feed Mechanism: Variable top Feed, Needle Feed, Unison Feed, Compound Feed			12	10	1, 2, 3, 6	1	1, 2	Skill Development	Global	Environment and Sustainability, Professional Ethics

 सत्यं जितं मुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

II	Introduction and Classification of Kid's and Women's Apparel 1. Glossary of Children's Wear Terms, styling features, sizes, garment use according, fabric selection to export quality.	6	5	1, 2, 3	2	1, 2	Skill Development	Global	Environment and Sustainability, Professional Ethics
III	Sewing of Kid's garment 1. Romper 2. Two-piece playsuits 3. Skirts 4. Dresses 5. Jumpsuits	30	25	1, 2, 3, 6	2, 3, 4	1, 2	Skill Development	Global	Environment and Sustainability, Professional Ethics
IV	Stitching of Women's garments 1. Skirt & its variation 2. Trouser & its variation 3. Shirt & its variation 4. Dress & its variation	30	25	1, 2, 3, 6	2, 3, 4	1, 2	Skill Development	Global	Environment and Sustainability, Professional Ethics
V	Operation Breakdown & Spec sheet Preparation 1. Garment operation breakdown and Process flow 2. Spec sheet preparation of garments	24	20	1, 2, 3, 6	4	1, 2	Skill Development	Global	Environment and Sustainability, Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Semester Exam	20	Practical examination	Attempt the questions practically in lab	Practical skill evaluation
Mid semester examination, Lab work	20	Practical examination	Component of working with one's hand	Keep the students on the task.	Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.	Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

REFERENCES				
1.	Aldrich, W. (2015). <i>Metric Pattern Cutting for Women's Wear - 6th Edition</i> .New York: Wiley-VCH GmbH & Co.			
2.	Carr, H. & Latham, B. (2008). <i>Technology of Clothing Manufacture - 4th Edition</i> . Oxford: Blackwell Publishing.			
3.	Crawford, C. A. (1993). <i>Fashion your Own Skirts the Simple Way</i> . New Delhi: Bloomsbury Publishing India Ltd.			
4.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.			
5.	Juvekar, V. B. (1953). <i>Easy Cutting</i> . Mumbai: Ball Co.			
6.	Moulton, B. (1968). <i>Simplified Tailoring</i> . London: BT Batsford Ltd.			
7.	Pandit, S. (1967). <i>A Manual of Children's Clothing</i> . Mumbai: Orient Longmans Limited.			
8.	Singer. (1989). <i>Sewing Pants that Fit</i> . Minnesota: Cowles Creative Publishing Inc.			
9.	Thomas, A. J. (1996). <i>Art of Sewing</i> . New Delhi: UBJ Publication Ltd.			
B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0				
Year	II	ADVANCED PATTERN MAKING (Major 6)	Credits / Hours per semester	4 (0+4) Credits /Hours per week (Practical: 120 hours) Total: 120 hours/semester

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	----------------------	----------------

Semester	I	Year of Introduction: 2023-24	Maximum Marks / Grade	100 Marks / O Grade (10-point scale)
Mode of Transaction	Practical		Minimum Marks	36 Marks

Course Outcome (CO)

- CO1 A thorough understanding of the basic terminologies related to sleeves, patterns of sleeves, collars, patterns of collars.
- CO2 Development of enhanced drafting skills for sleeves, collars and their variation.
- CO3 Students will gain control over pattern aspects for achieving desired fit in a women's dress and trouser.
- CO4 Enhanced ability to generate and manipulate patterns for well-fitting garments with a desired style line.
- CO5 Ability to detect pattern defects that affect fit of a garment and their rectification at the pattern making stage.

Unit No.	Topic	Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
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PRACTICAL

I	Sleeve and its modifications 1. Basic terminology of sleeve 2. Basic pattern of sleeve: various parameters controlling fit and fall of sleeve 3. Balance points in sleeve and its significance in fit and fall of sleeve 4. Balancing of patterns and notches and its importance 5. Discussion on various defects and their rectifications at pattern stage 6. Sleeve variation – cap / flare / shirt / puff; Grown on sleeve – dolman / Raglan (2pc / darted / 1pc); 2pc sleeve patterns	24	20	2, 3, 4	1, 2	1, 2	Skill Development	National, Global	Gender, Environment and Sustainability
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 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

II	Collar and its modifications 1. Collar terms and classifications 2. Fit problems of the collar 3. Variation of collar: shirt collar, straight collar, undercollar, folded basic collar 4. Collar variations: peter pan collar, sailor collar, collars with deep, open necklines 5. Basic mandarin 6. Collar with stand 7. All-in-one collar and stand 8. Roll collars	24	20	2, 3, 4	1, 2	1, 2	Skill Development	National, Global	Gender, Environment and Sustainability
III	Dress and its adaptation: 1. Introduction to fish dart and its difference from the open-ended darts 2. Fits of dresses – shift / sheath / box / tent / contoured 3. Importance and relevance of various parameters controlling the fit and fall of dresses 4. Dress variations – princess / panel	30	25	2, 3, 4	3	1, 2	Skill Development	National, Global	Gender, Environment and Sustainability
IV	Trouser and its adaptation: 1. Basic trouser block 2. Terminology used for trouser 3. Trouser leg line variations and fit variations – jeans / slacks / jumpsuit / dungaree 4. Various components of trouser i.e. pockets / fly etc.	30	25	2, 3, 4	3,4	1, 2	Skill Development	National, Global	Gender, Environment and Sustainability
V	Defects at pattern stage	12	10	2, 3, 4	5	1, 2	Skill Development	National, Global	Environment and Sustainability

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	1. Discussion of various defects and their rectifications at pattern stage								
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	20	Written Mode	Traditionally essay type	For depth and planned preparation.	Craft work	50	Practical Mode	Component of working with one's hand	Encourage application of concepts learnt
Open book test	10	Written Mode	Allowed choice of reference book	Measure what students can do with resources, less stress on memory					
Viva/Oral exam	10	Oral Mode	Individually or small group	Practical experience towards job interview situation					
Craft work	10	Practical Mode	Component of working with one's hand	Encourage application of concepts learnt					
Total	50				Total	50			

REFERENCES	
1.	Al-Haboui, M. H. (1992). <i>Anthropometry for a Mix of Different Populations</i> . Amsterdam: Applied Ergonomics, Elsevier.
2.	Annis, J. F. (1978). <i>Variability in Human Body Size- Anthropometric Source Book</i> . Washington DC: NASA Reference Publication.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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3.	Aldrich, W. (2015). <i>Metric Pattern Cutting for Women's Wear - 6th Edition</i> . New York: Wiley-VCH GmbH & Co.
4.	Armstrong, H. J. (2009). <i>Pattern making for Fashion design – 5th Edition</i> . Noida: Harper Collins Publishers India.
5.	Basia, S. (2010). <i>Technical Drawing for Fashion</i> . London: Laurence King Publishing.
6.	Holzman, D. C. (1996). <i>Fewer Sizes Fit All</i> . Technology Review. Discussion of Paal's method of creating an optimized sizing system based on anthropometric data.
7.	Hudson, P. B. (1979). <i>Generating Patterns</i> . Bobbin. 20(8).
8.	Peterson, E. A. (1980). <i>Standardization of industrial garment fit: Is it feasible? Is it necessary? Is it desirable?</i> London: Industrial Launderer.
9.	Reich, N., & Goldserry, E. (1993). <i>Development of body measurement tables for women 55 and older and the relationship to ready-to-wear garment size</i> . (Research Technical Report Number PCN 33-000006-18, ISR 06). Philadelphia: American Society for Testing and Materials/Institute for Standards Research.
10.	Shoben, M. M., & Ward, J. P. (1990). <i>Pattern Cutting and Making Up – Revised Edition</i> . Oxford: Butterworth Heinmann.
11.	Singh, D., & Young, R. K. (1995). <i>Body weight, waist-to-hip ratio, breasts and hips: roles in judgments of female attractiveness and desirability for relationships</i> . Ethology and Sociobiology.
12.	Stoudt, H. W. (1981). <i>The Anthropometry of the Elderly</i> . Human Factors, 23(1).
13.	Suhner, I. A. (2012). <i>Technical Drawing for Fashion Design: Garment Source Book</i> . Netherlands: The Pepin Press.
14.	Zarapkar, K. R. (2008). <i>Zarapkar System of Cutting</i> . Mumbai: Navneet Publication (India) Ltd.

B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0

Year	II	ANTHROPOMETRY, SIZING & GRADING (Major 7)	Credits / Hours per semester	4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester
Semester	I	Year of Introduction: 2023-24	Maximum Marks / Grade	100 Marks / O Grade (10-point scale)
Mode of Transaction		Practical	Minimum Marks	36 Marks

Course Outcome (CO)

- CO1 Clear understanding of the importance of anthropometric studies.
- CO2 Gain and understanding of the parameters of different size charts and sizing methods followed by apparel manufacturers.
- CO3 Knowledge about the technicalities of pattern components likes darts and contouring principles.
- CO4 Education about the different methods of sizing and grading.

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

CO5 Students shall learn to develop technical sketches and specification sheets.

CO6 Students will develop size chart through body measurements.

Unit No.	Topic	Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL									
I	Study of human figure: 1. Meaning and Purpose of Anthropometrics 2. 8 Head theory for Men and Women 3. Traditional and new methods and instruments used to measure human figure in apparel industry 4. Advantages of anthropometric measurements 5. Figure analysis	16	14	1, 2	1	1, 2	Employability, Skill Development	National, Global	Gender, Professional Ethics
II	Sizing: 1. Understanding of size chart-Woven and Knit 2. Sizing survey - History, advantages, challenges and factors affecting sizing 3. Need of sizing survey in India 4. Generation of size chart 5. Made-to-measure concept and 3D body scanning	28	24	1, 2, 3, 4	2, 4	1, 2	Employability, Skill Development	Regional, National,	Gender, Professional Ethics Human Values
III	Grading: 1. Grading rules 2. Methods of grading	20	16	1, 2	4	1, 2	Employability, Skill Development	National, Global	Gender, Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	---------------	---------

	3. Grading of patterns (women's wear, men's wear, children's wear)								
IV	Designing with darts and styleline and Principle of added fullness: 1. Graduated and radiating darts; Parallel darts; Asymmetric darts; Intersecting darts 2. Classic princess, Armhole princess and panel princess styleline 3. Principle of added fullness and blouson foundation	20	16	1, 2, 3	3	1, 2	Employability, Skill Development	Global	Gender, Professional Ethics
V	Contouring: 1. Contouring principles 2. Contour guide patterns 3. Classic, empire, surplice, off-shoulder, halter	20	16	1, 2, 3	3	1, 2	Employability, Skill Development	Global	Gender, Professional Ethics
VI	Development of Techpack: 1. Flat/Technical sketches of top, shirt, dress, trouser 2. Developing spec sheet	16	14	2, 3, 6	5	1, 2	Employability, Skill Development	National, Global	Gender, Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	20	Written Mode	Traditionally essay type	For depth and planned preparation.	Craft work	50	Practical Mode	Component of working with one's hand	Encourage application of concepts learnt

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

Open book test	10	Written Mode	Allowed choice of reference book	Measure what students can do with resources, less stress on memory					
Viva/Oral exam	10	Oral Mode	Individually or small group	Practical experience towards job interview situation					
Craft work	10	Practical Mode	Component of working with one's hand	Encourage application of concepts learnt					
Total	50				Total	50			

REFERENCES	
1.	Al-Haboui, M. H. (1992). Anthropometry for a Mix of Different Populations. Amsterdam: Applied Ergonomics, Elsevier.
2.	Annis, J. F. (1978). Variability in Human Body Size- Anthropometric Source Book. Washington DC: NASA Reference Publication.
3.	Aldrich, W. (2015). Metric Pattern Cutting for Women's Wear - 6 th Edition. New York: Wiley-VCH GmbH & Co.
4.	Armstrong, H. J. (2009). Pattern making for Fashion design – 5 th Edition. Noida: Harper Collins Publishers India.
5.	Basia, S. (2010). Technical Drawing for Fashion. London: Laurence King Publishing.
6.	Holzman, D. C. (1996). Fewer Sizes Fit All. Technology Review. Discussion of Pal's method of creating an optimized sizing system based on anthropometric data.
7.	Hudson, P. B. (1979). Generating Patterns. Bobbin. 20(8).
8.	Peterson, E. A. (1980). Standardization of industrial garment fit: Is it feasible? Is it necessary? Is it desirable? London: Industrial Launderer.

 सत्यं जितं मुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

9.	Reich, N., & Goldserry, E. (1993). Development of body measurement tables for women 55 and older and the relationship to ready-to-wear garment size. (Research Technical Report Number PCN 33-000006-18, ISR 06). Philadelphia: American Society for Testing and Materials/Institute for Standards Research.
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11.	Singh, D., & Young, R. K. (1995). Body weight, waist-to-hip ratio, breasts and hips: roles in judgments of female attractiveness and desirability for relationships. <i>Ethology and Sociobiology</i> .
12.	Stoudt, H. W. (1981). The Anthropometry of the Elderly. <i>Human Factors</i> , 23(1).
13.	Suhner, I. A. (2012). <i>Technical Drawing for Fashion Design: Garment Source Book</i> . Netherlands: The Pepin Press.
14.	Zarapkar, K. R. (2008). <i>Zarapkar System of Cutting</i> . Mumbai: Navneet Publication (India) Ltd.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0												
Year	II	INTELLECTUAL PROPERTY RIGHTS (Multi-disciplinary Course 3)			Credits / Hours per semester		4 (4+0) Credits / 4 Hours per week (Practical: 60 hours) Total: 60 hours/semester					
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)					
Mode of Transaction		Lecture			Minimum Marks		36 Marks					
Course Outcome (CO) CO1 Developing a discerning approach to Intellectual Property Rights. CO2 Diving deep into the concept of intellectual property as a business/commercial property. CO3 Acquire and understanding of the different ways to protect intellectual property. CO4 Students shall be able to elucidate the procedures and process of protection. CO5 Attaining knowledge of various IP tools and how they can be integrated into business.												
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)	
THEORY												
I	Introduction of Intellectual property rights 1. Need of Intellectual property rights 2. Intellectual property rights Tools 3. Importance of intellectual property rights 4. The IPR System in India 5. IPR Policy 2016 and its objectives 6. IPR Status of India 7. The Structure of the Intellectual Property Offices of INDIA			15	25	1, 2		1, 3, 4	4	Employability, Skill Development	National, Global	Human value, Professional Ethics

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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II	Copyright, Trademark, Geographical Indication 1. Introduction, Need, Advantages & Disadvantages 2. Types of trademark, , flow chart of trademark application filing upto acceptance 3. Registration of copyright, Concept of collective management of copyright "Use of Work" protected by copyright 4. Protection of GI at National/International Level.	8	14	1, 2	2, 3, 4	4	Employability, Skill Development	Regional, National, Global	Human value, Professional Ethics
III	Patents, Industrial Designs, Trade secrets 1. Introduction, Need, Advantages & Disadvantages 2. Protection of patents 3. Registration of patent in India & abroad 4. Flow chart of patent granting system 5. Registration of Industrial design in India & Abroad 6. Protection of trade secrets 7. Developing trade secret strategy for business	14	24	1, 2	2, 3, 4	4	Employability, Skill Development	National, Global	Human value, Professional Ethics

 सत्यं जितं मुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

IV	IP Transactions, Web Sites & domain names, IP in International Business Strategy, IP Audits, IP Valuation. 1. Introduction & Need 2. Licensing, Franchising, merchandising 3. Protection of elements of the website 4. PCT, Madrid, Hague 5. Audit Plan of audits 6. Significance parameters for assisting valuation	14	24	1, 2	2, 3, 4	4	Employability, Skill Development	Global	Human value, Professional Ethics
V	Character merchandising 1. Introduction 2. Source of characters 3. Brief history of Character merchandising 4. Types of Character merchandising rights and ownership of characters 5. Legal protection of the merchandising character	8	13	1, 2	2, 5	4	Employability, Skill Development	Global	Human value, Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-Semester Exam	20	Written mode	Traditionally essay type	For depth and planned preparation	Semester Exam	50	Written mode	Traditionally essay type	For depth and planned preparation
Open book test	20	Written mode	Allowed choice of reference Book	Measures what students can do with					

 सत्यं जितं मृतमश्नुते Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

				resources, less stress on memory					
Case Studies	10	Written mode	Analyse a given case (real or fictional)	To assess thinking, value, and attitude					
Total	50				Total	50			

REFERENCES	
1.	Tewari, R. & Bhardwaj, M. (2021) Intellectual Property A Primer for Academia. Chandigarh: publication bureau panjab university
2.	A stitch in time-Smart use of Intellectual Property by textile companies, WIPO.
3.	icsi (2015), intellectual property rights-law and practice
4.	Annual Report 2015-16: O/O Controller General Of Patents, Designs, Trademarks And Geographical Indications
5.	Intellectual property and Tech. law updates January 2017
6.	Kanthababu, M. (2012) overview of intellectual property rights (iprs)- centre for intellectual property rights anna university, chennai

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	INTERNATIONAL TRADE PRACTICES (Skill Enhancement Course 3)			Credits / Hours per semester		2 (2+0) Credits / 2 Hours per week (Theory: 30 hours) Total: 30 hours/semester				
Semester	I	Year of Introduction: 2023-24			Maximum Marks / Grade		50 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture			Minimum Marks		18 Marks				
Course Outcome (CO) CO1 Define the basic concepts and principles of international trade, including comparative advantage, globalization, and trade barriers. CO2 The students will gain fundamental knowledge regarding import and export procedures, documentation, and regulations. CO3 Understand the legal framework governing international trade, including trade regulations, anti-dumping laws, and intellectual property rights. CO4 Develop an awareness of compliance requirements and ethical considerations in global business transactions.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Procedures and Documents 1. Terms and definitions 2. Basic Import Export, IEC 3. International trade contract procedure 4. Methods of Payments 5. International trade documents 6. Uniform customs and Practices			11	35	1, 2	1	5	Employability	Global	Professional Ethics
II	Import-Export 1. Export and import procedure under customs 2. Modes of Transport. Types of Containers			10	35	1, 2	2	5	Employability	Global	Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	----------------------	----------------

	3. Types of risks in international trade 4. GST in Export & Import								
III	Policy and Shipment 1. Foreign Trade Policy 2. FEMA regulations relating to exports and imports 3. Export credit from banks in India: Pre-shipment and Post shipment credit Application of sustainable materials and technologies	9	30	1, 2	3	5	Employability	Global	Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	15	Written mode	Traditionally essay type	For depth and planned preparation	Semester Exam	25	Written mode	Traditionally essay type	For depth and planned preparation
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.					
Total	25				Total	25			

REFERENCES	
1.	David, A., & Robbins, S., P. (1996). Human Resource Management. New York: John Wiley.
2.	Frings, G., S. (1999). Fashion from Concept to Consumer. New Jersey: Prentice Hall.
3.	Gorden, L., J. (1961). Economics for Consumer. New York: American Book Co.
4.	Chris, G., B. (1960). An Outline on Advertising. New York: The Macmillan Co.

 सत्यं जितं मुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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5.	Kreitner, R. (2004). Management - ninth ed. Boston: Houghton Mifflin.
6.	Kotler, P. (2004). Principles of Marketing -tenth ed. New Delhi: Prentice Hall of India Pvt. Ltd.
7.	Robbins, S., P., & Coulter, Mary. (1996). Management. New Delhi: Prentice Hall of India Pvt. Ltd.
8.	Robbins, S., P., & David, A. (2001). Fundamentals of Management. New Delhi: Pearson India.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0										
Year	II	SUSTAINABLE APPAREL PRODUCTION (Indian Knowledge System Course 2)		Credits / Hours per semester		2 (2+0) Credits / 2 Hours per week (Theory: 30 hours) Total: 30 hours/semester				
Semester	I	Year of Introduction: 2023-24		Maximum Marks / Grade		50 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture		Minimum Marks		18 Marks				
Course Outcome (CO) CO1 Define and grasp the key concepts and principles of sustainable apparel production, including environmental, social, and economic dimensions. CO2 Analyze the principles of sustainable design and its impact on the entire product lifecycle. CO3 The students will gain a knowledge on fashion sustainability. CO4 Formulate plans to enhance the overall sustainability performance of a fashion brand.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY										
I	Environmental impacts of apparel production, distribution and consumption 1. Introduction 2. Major environmental impacts 3. Environmental impact of: a. apparel manufacturing and distribution b. consumer care c. end of life/disposal 4. Effluent treatment in apparel industry		6	20	1, 2	1	1	Skill Development	Global	Environment and Sustainability

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

II	Life Cycle Assessment (LCA) 1. Definition of LCA 2. Phases of LCA 3. Organizations working on LCA and Standards 4. LCA model for textiles 5. Limitations of LCA	6	20	1, 2	2	1	Skill Development	Global	Environment and Sustainability
III	Sustainability and Fashion 1. Sustainable design strategies for fashion design process 2. New business models for sustainable fashion 3. Sustainable design principles 4. Framework for fashion sustainability 5. Application of sustainable materials and technologies	9	30	1, 2	3	1	Skill Development	Global	Environment and Sustainability
IV	Assessment of Sustainable Apparel Production 1. Eco-parameters and testing of sustainable textiles and apparels 2. Test methods related to characteristics, performance 3. Ecological and safety parameters 4. Sustainable measures taken by industry affiliates, nonprofit organizations and government and educational institutions	9	30	1, 2	4	1	Skill Development	Global	Environment and Sustainability

SUGGESTED EVALUATION	
CCE (50% IA)	SEE (50% UA)

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	----------------------	----------------

Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	15	Written mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	25	Written mode	Traditionally essay type	For depth and planned preparation
Class test	5	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Quizzes/Objective test	5	Written mode	Short duration structured test	Excellent validity as greater syllabus coverage.					
Total	25				Total	25			

REFERENCES	
1.	Muthu, S. S. (2023). <i>Progress of Life Cycle Assessment in Textiles and Clothing</i> . Singapore: Springer Nature Pte Ltd.
2.	Nayak, R. & Padhye, R. (2015). <i>Garment Manufacturing Technology</i> . Cambridge: Woodhead Publishing.
3.	Parthiban, M., Srikrishnan, M. R. & Kandhavadi, P. (2019). <i>Green Apparels</i> . New Delhi: Woodhead Publishing India Pvt. Ltd.
4.	Muthu, S. S. (2015). <i>Handbook of Sustainable Apparel Production</i> . New York: CRC Press.
5.	Fairhurst, C. (2008). <i>Advances in Apparel Production</i> . New York: CRC Press.
6.	Muthu, S. S. (2023). <i>Circular Economy in Textiles and Apparels</i> . Cambridge: Woodhead Publishing.

SEMESTER II

Course Code	Course Title	Credits	Course Type
FAM2004C	Men's Wear	4 (0+4)	Major
FAM2014C	Computer Aided Pattern Designing & Development	4 (0+4)	Major
FAM2024C	Processing & Packaging in Apparel Industry	4 (2+2)	Major
FAE2004C	Budgeting & Costing in Apparel Industry	4 (4+0)	Minor
AEC2184C	English for Digital & Virtual Communication	2 (2+0)	AEC
SEC2264C	Global Sourcing	2 (2+0)	SEC
VAC2244C	Finishing Technology	2 (1+1)	VAC
	Total	22	

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0										
Year	II	MEN’S WEAR (Major 8)	Credits / Hours per semester		4 (0+4) Credits / Hours per week (Practical: 120 hours) Total: 120 hours/semester					
Semester	I	Year of Introduction: 2023-24	Maximum Marks / Grade		100 Marks / O Grade (10-point scale)					
Mode of Transaction		Practical	Minimum Marks		36 Marks					
Course Outcome (CO) CO1 Study different body types and style preferences of men to create tailored and personalized fashion solutions. CO2 Develop and manipulate patterns for men's wear garments, considering fit, style, and construction techniques. CO3 Demonstrate advanced skills in constructing men's wear garments, using appropriate techniques and materials through a spec. sheet CO4 Stay updated on current trends, innovations, and emerging technologies within the realm of men's fashion to develop collection and portfolio.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL										
I	Drafting and stitching of men’s garments in trends: 1. Upper wear: One Indian Wear [Kurta] 2. Lower wear: One Indian Wear [Churidar]		24	20	1, 2, 3, 6	1	1, 2	Skill Development	Global	Environment and Sustainability
II	Basic Blocks: Adults bodice block (shirt) and lower block (trouser) for men 1. Different features to be covered: shirt-yoke, collars, sleeves, cuff, plackets, pockets, variation in hemlines;		24	20	1, 2, 3, 6	1	1, 2	Skill Development	Global	Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

	2. Trouser- waistband, different type of pockets, fly								
III	Jacket: 1. Indian / Western / Blazer - Linings, interlinings, pockets, lapel.	24	20	1, 2, 3, 6	1	1, 2	Skill Development	Global	Environment and Sustainability
IV	Menswear Designing 1. Sample preparation from spec sheet, Specification sheet analysis and its pattern making for the designed garment, 2. Generations of sample garment (one garment)	24	20	1, 2, 3, 6	2, 3	1, 2	Skill Development	Global	Environment and Sustainability
V	Theme based collection on current fashion trends	24	20	1, 2, 3, 6	1, 2, 3, 4	1, 2	Skill Development	Global	Environment and Sustainability

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Semester Exam	20	Practical examination	Attempt the questions practically in lab	Practical skill evaluation
Mid semester examination, Lab work	20	Practical examination	Component of working with one's hand	Keep the students on the task.	Class work	20	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	--	----------------------	----------------

Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.	Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.
Total	50				Total	50			

REFERENCES	
1.	Aldrich, W. (2015). <i>Metric Pattern Cutting for Women's Wear - 6th Edition</i> . New York: Wiley-VCH GmbH & Co.
2.	Cooklin G. (1997). <i>Garment Technology for Fashion Designers</i> . New Delhi: Wiley India Pvt. Ltd.
3.	Crawford, C. A. (1993). <i>Fashion your Own Skirts the Simple Way</i> . New Delhi: Bloomsbury Publishing India Ltd.
4.	Juvekar, V. B. (1953). <i>Easy Cutting</i> . Mumbai: Ball Co.
5.	Long, C. (2000). <i>Sewing with Knits: Classic, Stylish Garments from Swimsuits to Eveningwear</i> . Connecticut: Taunton Press.
6.	Moulton, B. (1968). <i>Simplified Tailoring</i> . London: BT Batsford Ltd.
7.	Pandit, S. (1967). <i>A Manual of Children's Clothing</i> . Mumbai: Orient Longmans Limited.
8.	Singer. (1989). <i>Sewing Pants that Fit</i> . Minnesota: Cowles Creative Publishing Inc.
9.	Thomas, A. J. (1996). <i>Art of Sewing</i> . New Delhi: UBJ Publication Ltd.
10.	Zarapkar, K.R. (2008). <i>Zarapkar System of Cutting</i> . Navneet Publication (India) Ltd., Mumbai.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	COMPUTER AIDED PATTERN DESIGNING & DEVELOPMENT (Major 9)			Credits / Hours per semester		4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Practical			Minimum Marks		36 Marks				
Course Outcome (CO)											
CO1 Knowledge about the different pattern making software used in apparel industry.											
CO2 Demonstrate proficiency in using industry-standard Computer-Aided Design (CAD) software for pattern designing and development.											
CO3 Apply grading techniques using CAD tools to create size variations for different body types and garment specifications											
CO3 Develop competency in CAD applications for pattern making and alterations.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Introduction to computer aided pattern design and development 1. Need of pattern making software 2. Features of commercially available pattern making Software			6	5	1, 2	1	3	Employability, Skill Development	Global	Gender, Environment and Sustainability
II	Pattern Development on TukaCAD Software 1. Pattern making of basic block, basic skirt, t-shirt, trouser, shirt 2. Pattern grading: grading standard size blocks to various size, master pattern grading 3. Marker planning			48	40	1, 2, 3, 4	2	3	Employability, Skill Development	Global	Gender, Environment and Sustainability

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
---	----------------------	----------------

III	Pattern Development on Richpeace Software 1. Pattern making of basic block, basic skirt, t-shirt, trouser, shirt 2. Pattern grading: grading standard size blocks to various size, master pattern grading 3. Marker planning	48	40	1, 2, 3, 4	2	3	Employability, Skill Development	Global	Gender, Environment and Sustainability
IV	Fitting and pattern alteration in CAD 1. Fitting: analysis of garment fit on a toile, solving fitting problems in various garments 2. Pattern alteration-importance of altering patterns: Common pattern alterations in a garment, alteration of pattern for irregular figures	18	15	1, 2, 3, 4	3	3	Employability, Skill Development	Global	Gender, Environment and Sustainability

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Lab work	25	Practical	Component of working with one's hand	Keep the students on the task.	Lab work	15	Practical	Component of working with one's hand	Keep the students on the task.
Craft work	15	Practical	Component of working with one's hand	Encourage application of concepts learnt.	Craft work	10	Practical	Component of working with one's hand	Encourage application of concepts learnt.
Quiz	10	Oral	Small group of 2-5 members	Assess memory power.	Viva/Oral examination	25	Viva	Individually or in small groups.	Practical experience towards job

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

			work on a joint task						interview situation.
Total	50				Total	50			

REFERENCES	
1.	Armstrong, H. J. (2009). <i>Pattern making for Fashion design – 5th Edition</i> . Noida: Harper Collins Publishers India.
2.	Cooklin G. (1992). <i>Pattern Cutting for Women's Outerwear</i> . New Delhi: Wiley India Pvt. Ltd.
3.	Cooklin G. (1990). <i>Pattern Grading for Women's Clothes</i> . New Delhi: Wiley India Pvt. Ltd.
4.	Cooklin G. (1992). <i>Pattern Grading for Men's Clothes</i> . New Delhi: Wiley India Pvt. Ltd.
5.	Cooklin G. (1991). <i>Pattern Grading for Children's Clothes</i> . New Delhi: Wiley India Pvt. Ltd.
6.	Zarapkar, K. R. (2008). <i>Zarapkar System of Cutting</i> . Mumbai: Navneet Publication (India) Ltd.
7.	TukaCAD software user manual.
8.	Richpeace software user manual.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	PROCESSING & PACKAGING IN APPAREL INDUSTRY (Major 10)			Credits / Hours per semester		4 (2+2) Credits / 6 Hours per week (Theory: 30 hours Practical: 60 hours) Total: 90 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture and Practical			Minimum Marks		36 Marks				
Course Outcome (CO)											
CO1 Develop a holistic understanding of the finishing and packaging processes in textiles and apparel industry.											
CO2 Gain a comprehensive understanding of various processing techniques used in the apparel industry, including dyeing, printing, and finishing											
CO3 Develop skills in quality control to ensure consistency and adherence to standards in all processing stages.											
CO4 Understand effective packaging strategies for various types of apparel products, considering protection, aesthetics, and sustainability.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
Theory											
I	Dyeing 1. Sequence and Objectives of fabric preparatory processes 2. Classification of Dyes based on Method of Application 3. Dyeing Methods of Cellulosic, Protein and Synthetic Fibers			12	20	1, 2, 3	1	6	Employability, Skill Development	Global	Environment and Sustainability
II	Printing 1. Difference between Dyeing and Printing 2. Styles of Printing – Direct, Discharge and Resist 3. Methods of Printing – Block, Roller, Screen, Digital 4. After Treatment Processes – Fixation			12	20	1, 2, 3	1	6	Employability, Skill Development	Global	Environment and Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

III	Pressing and Packaging - Pressing-Objective of pressing, fabric and garment characteristics, Pressing equipment, parametric conditions, Types of pressing. - Packaging & Folding: Criteria for packaging Specifications & standards for packaging & folding Material & equipment used for packaging Considerations for packaging & folding. - Background to the standard - Overview of Packaging Industry - A definition of packaging - The functions of packaging - Packaging materials - Review of the packaging legislation - Printing and decoration of packaging, include labels and labelling - Environmental issue and waste disposal	6	10	1, 2, 3	4	6	Employability, Skill Development	Global	Environment and Sustainability
PRACTICAL									
IV	Dyeing - Dyeing of cotton fabric with direct dye, reactive dye, vat dye and sulphur dye - Dyeing of silk fabric with acid dye and basic dye - Dyeing of wool fabric using metal complex dye and reactive dye	24	20	1, 2, 3	3	6	Employability, Skill Development	Global	Environment and Sustainability
V	Printing Printing of cotton using direct, resist and discharge styles (for each select one or two dyes)	24	20	1, 2, 3	3	6	Employability, Skill Development	Global	Environment and Sustainability

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
---	---------------	---------

VI	Packaging- folds, materials and relevance 1. Infant wear 2. Kids wear 3. Women's wear 4. Men's wear 5. Innovating a folding and packaging technique	12	10	1, 2, 3	4	6	Employability, Skill Development	Global	Environment and Sustainability
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	20	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written mode	Traditionally essay type	For depth and planned preparation
Class test	15	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Lab Work	15	Practical	Component of working with one's hand	Keep the students on the task.					
Total	50				Total	50			

REFERENCES	
1.	Broadbent, A. D. (2001). <i>Basic Principles of Textile Coloration</i> . London: Society of Dyers and Colourists.
2.	Datya, K. V., & Vaidya, A. A. (1984). <i>Chemical Processing of Synthetic Fibers and Blends</i> . New York: Wiley-VCH GmbH & Co.
3.	Lewin, M., & Sello, S., B. (1984). <i>Chemical Processing of Fibers and Fabrics – Functional Finishes, Part B</i> . New York: Marcel Dekker.
4.	Marsh, J. T. (1979). <i>An Introduction to Textile Finishing</i> . Ahmedabad: B. I. Publications Pvt. Ltd.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

5.	Miles, L. W. C. (1994). <i>Textile Printing: 2nd Edition</i> . London: Society of Dyers and Colourists.
6.	Schindler, W. D., & Hauser, P. J. (2004). <i>Chemical Finishing of Textiles</i> . New Delhi: Woodhead Publishing Ltd.
7.	Shenai, V. A. (1981). <i>Technology of Textile Processing - Vol. III, V, VII & VIII</i> . Chennai: Shevak Publications.
8.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	BUDGETING & COSTING IN APPAREL INDUSTRY (Minor 3)			Credits / Hours per semester		4 (4+0) Credits / 4 Hours per week (Theory: 60 hours) Total: 60 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture			Minimum Marks		36 Marks				
Course Outcome (CO)											
CO1 Demonstrate Fundamental understanding of costing methods in apparel manufacturing.											
CO2 Develop ability to calculate the material, labour and manufacturing cost of various apparel products.											
CO3 Ability to elucidate the various factors affecting retail apparel cost.											
CO4 Comprehend the concepts of GST in apparel industry											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Introduction to costing 1. Definition and objectives of costing 2. Elements and classification of cost: direct, indirect, overheads 3. Difference between costing and pricing 4. Stages of costing 5. Costing methods 6. Breakeven analysis			12	20	1, 2, 3, 5	1	5	Employability, Entrepreneurship, Skill Development	Global	Professional Ethics
II	Material cost 1. Parameters involving material costing 2. Inventory control and evaluation, accounting for wastage, scrap and defects, depreciation 3. Factors influencing fabric cost and trims cost			15	25	1, 2, 3, 5	2	5	Employability, Entrepreneurship, Skill Development	Global	Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	4. Fabric costing for woven and knitted products: weaving cost, costing as per fabric construction, fabric cost per meter, fabric cost/garment, yarn cost, calculation for GSM, fabric cost per kg 5. Trims and accessories cost: cost of trims (labels, tags, buttons, etc.), accessories (hanger, inner board, poly bag, buttons, etc.), CMT charges, other charges (print, embroidery, etc.)								
III	Labor and manufacturing cost 1. Labor cost: parameters of labor costing, labor cost budgeting and variances, wage rate and piece rate: comparative analysis, incentive plans 2. Manufacturing cost: classification of overheads, allocation and appointment, calculation of prime cost 3. General operating expenses.	15	25	1, 2, 3, 5	2	5	Employability, Entrepreneurship, Skill Development	Global	Professional Ethics
IV	Retail pricing 1. Markups/markdown calculation 2. Retail pricing strategy overview 3. Export pricing 4. INCOTERMS and their application 5. Freight costing: types of freight cost, freight cost calculations 6. Breakeven analysis	12	20	1, 2, 3, 5	3	5	Employability, Entrepreneurship, Skill Development	Global	Professional Ethics
V	Goods and Services Tax (GST) 1. Introduction 2. Journey of GST in India 3. Objectives, components and advantages of GST	6	10	1, 2	4	5	Employability, Entrepreneurship, Skill Development	Global	Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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4. Tax laws before GST								
5. GST and price reduction								
6. New compliances under GST								
7. GST in apparel industry								

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written mode	Traditionally essay type	For depth and planned preparation
Class test	15	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Quizzes/Objective test	10	Written mode	Short duration structured test	Excellent validity as greater syllabus coverage.					
Total	50				Total	50			

REFERENCES	
1.	Clodfelter, R. (2015). <i>Retail Buying: From Basics to Fashion</i> . New York: Fairchild Publications Inc.
2.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.
3.	Horngren, C. T., Datar, S. M., & Rajan, M. V. (2015). <i>Cost Accounting - 15th Edition</i> . Chennai: Pearson India.
4.	Jeffrey, M. & Evans, N. (2011). <i>Costing for the Fashion Industry</i> . Oxford: Berg Publishers.
5.	Lezama, M., Webber, B., & Dagher, C. (2004). <i>Sourcing Practices in Apparel Industry</i> . London: Commonwealth Secretariat.
6.	Nayak, R., & Padhye, R. (2015). <i>Garment Manufacturing Technology</i> . New Delhi: Woodhead Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	GLOBAL SOURCING (Skill Enhancement Course 4)			Credits / Hours per semester		2 (2+0) Credits / 2 Hours per week (Theory: 30 hours) Total: 30 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture			Minimum Marks		36 Marks				
Course Outcome (CO)											
CO1 Develop a comprehensive understanding of the role of sourcing in the overall supply chain management process.											
CO2 Assess and select suitable countries and vendors for sourcing based on factors such as cost, quality, lead time, and ethical considerations.											
CO3 The students will gain knowledge on dependency of the apparel production process and sourcing											
CO4 Understand and promote ethical sourcing practices, including social responsibility, fair labor practices, and environmental sustainability.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Understanding Basics of Global Sourcing 1. Terms 2. Sourcing and its evolution 3. Need and relevance of Global Sourcing 4. Advantages and Disadvantages of Sourcing			9	30	1, 2	1	5	Employability, Entrepreneurship	Global	Professional Ethics
II	Global Sourcing Process and legal aspects 1. Make and Buy decisions 2. Development and management of Suppliers			9	30	1, 2, 3	2	5	Employability, Entrepreneurship	Global	Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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	3. Negotiations and Supplier Evaluation.								
III	Opportunities and challenges in Global Sourcing 1. Effects of Global Sourcing on the Industry. 2. Sourcing and Sustainability Considerations.	6	20	1, 2	3	5	Employability, Entrepreneurship	Global	Professional Ethics
IV	Current Scenario in Global Sourcing 1. Trends in Global Sourcing	6	20	1, 2	4	5	Employability, Entrepreneurship	Global	Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	15	Written Mode	Traditionally essay type	For depth and planned preparation	Semester Exam	25	Written mode	Traditionally essay type	For depth and planned preparation
Class work	10	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)					
Total	25				Total	25			

REFERENCES	
1.	Cadigan, Erin "Sourcing and selecting textiles for fashion" Bloomsbury, New York, 2014
2.	David Birnbaum, "Birnbaum's Global Guide To Material Sourcing" Fashionindex, 2005
3.	E.Glock Ruth and I. Kunz Grace, "Apparel Manufacturing - Sewn Product Analysis", Blackwell Scientific Publications, 1996
4.	http://www.onlineclothingstudy.com/2013/07/sourcing-of-clothing-fabrics-on.html
5.	Grace I. Kunz, Myrna B. Garner "Going global : the textile and apparel industry" 2nd edition, Fairchild Books, New York, 2011
6.	Herold Carr and Barbara Lathem, "The Technology of Clothing Manufacturing", 2nd Edition, Blackwell Scientific Publications, London, 1988.
7.	Janace E. Bubonia, editor: Olga T. Kontzias "Apparel production terms and processes" Fairchild; Oxford: Berg[distributor], New York, 2012
8.	Jeannette Jamow, Kitty G.Dickerson,"Inside the Fashion Business", Prentice-Hall of India,1997.
9.	Rugman, A and Collinson, S., "International Business" Pearson, London, 2012

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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10.	Tyler J David "Materials Management in Clothing Production", 1991.
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	FINISHING TECHNOLOGY (Value Added Course 2)			Credits / Hours per semester		2 (1+1) Credits / 3 Hours per week (Theory: 15 hours Practical: 30 hours) Total: 45 hours/semester				
Semester	II	Year of Introduction: 2023-24			Maximum Marks / Grade		100 Marks / O Grade (10-point scale)				
Mode of Transaction		Lecture and Practical			Minimum Marks		36 Marks				
Course Outcome (CO) CO1 Develop a comprehensive understanding of various finishing processes used in textiles and apparel manufacturing. CO2 Assess and select appropriate finishes for different types of fabrics and garments based on desired properties and end-use applications. CO3 Demonstrate and understanding of the various types of finishes and to identify their effects on properties and their end uses in the apparel sector CO4 The students know the modern techniques of garment finishing in relation to productivity, cost, quality and performance CO5 Develop a comprehensive knowhow for finishing procedures, including standard operating procedures (SOPs) and quality control protocols by practice.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
THEORY											
I	Fabric finishing 1. Objectives and Significance of finishing 2. Classification of finishes 3. Principle, Process and Application of Chemical finishes: Softening, Stiffening, Durable Press Finish, Weighing, Crease Resistance, Soil Release, Flame Retardant, Water Repellent, Rot and Mildew, Moth Proof and Antistatic Finish. 4. Principle, Process and Application of Mechanical Finishes: Calendaring,			5	17	1, 2, 3	1, 2, 3	6	Employability, Entrepreneurship, Skill Development	Global	Environment Sustainability

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

	Sanforizing, Raising, Brushing, Crabbing, Decatizing, Parchmenting, Milling, etc.								
II	Finishing of wool 1. Milling, setting, shrink-resistant finishing, special finishing of silk 2. Energy efficient technology; Low liquor application and foam finishing. 3. Finishing of synthetics; Heat setting, Antistatic and other special finishing, Nanotechnology 4. Finishing machines: Mangles, driers and Stenters	5	17	1, 2, 3	1, 2, 3, 4	6	Employability, Entrepreneurship, Skill Development	Global	Environment Sustainability
III	Finishing of Garments 1. Finishing of Garments - Different types of finish - Durable press finish 2. Wash n wear finish 3. Spotting and washing of garments 4. Identification of stains, characteristics & history - Selection criteria of spotting chemicals - Factors for spotting 5. Finishing of jeans with special emphasis on various types of jeans washing 6. Stone Wash, acid wash, enzyme wash, sandblasting, ozone and lazer fading, quick wash denims, crush finish. 7. Environment pollution, eco friendliness in washing & finishing. 8. Cost estimation of finishing processes - Basic knowledge on the cost involvement of the various types of finishes.	5	17	1, 2, 3	1, 2, 3	6	Employability, Entrepreneurship, Skill Development	Global	Environment Sustainability
PRACTICAL									

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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IV Garment finishes-chemical Finishes on garments (shirt/denims) 1. Various jean washes- mechanical and chemical 2. Abraded effect (sandpaper, abrading machine) 3. Spray finishing 4. Bleaching 5. Innovating a denim finish using above methods 6. Stain removal (grease, blood, lipstick, tea/coffee, gravy, ink/ball point, soil so on.)	30	50	1, 2, 3	5	6	Employability, Entrepreneurship, Skill Development	Global	Environment Sustainability
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	20	Written Mode	Traditionally essay type	For depth and planned preparation.	Semester Exam	50	Written mode	Traditionally essay type	For depth and planned preparation
Class test	15	Written mode	Traditionally essay type	Fixed date forces students to learn.					
Lab Work	15	Practical							
Total	50				Total	50			

REFERENCES	
1.	Marsh, J. T. (1979). An Introduction to Textile Finishing. Ahmedabad: B. I. Publications Pvt. Ltd.
2.	Booth, J. E. (1996). <i>Principles of Textile Testing – 3rd Edition</i> . New York: CBS Publishers & Distributors Pvt. Ltd.
3.	Carr, H. & Latham, B. (2008). <i>Technology of Clothing Manufacture - 4th Edition</i> . Oxford: Blackwell Publishing.
4.	Corbman, B. P. (1985). <i>Textiles: Fiber to Fabrics - 6th Edition</i> . New York: McGraw-Hill Education.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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5.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.
6.	Lewin, M., & Sello, S. B. (1984). <i>Chemical Processing of Fibres and Fabrics - Functional Finishes, Part B</i> . New York: Mercel Dekker.
7.	Mehta, P. V. (2012). <i>Quality Management Handbook for the Apparel Industry</i> . New Delhi: New Age International Pvt. Ltd.
8.	Tortora, P. G., & Collier, B. J. (1996). <i>Understanding Textiles- 7th Edition</i> . New Jersey: Prentice Hall.

B. Sc. (F.T.) (Honors) Fashion and Apparel Technology Second Year – Level 5.0											
Year	II	SUMMER INTERNSHIP (Summer Internship)		Credits / Hours per semester		4 (0+4) Credits / 4 Hours per day (30 days) Total: 120 hours/semester					
Semester	II	Year of Introduction: 2024-25		Maximum Marks / Grade		100 Marks / O Grade (10-point scale)					
Mode of Transaction		Lecture and Practical		Minimum Marks		36 Marks					
Course Outcome (CO)											
CO1 To enhance student’s personal and professional development through hands on skill in any fashion and apparel related firm.											
CO2 Gain insights into the operational dynamics of apparel industry.											
CO3 Cultivate and strengthen entrepreneurial mindset and skills.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Internship of 1 month in any of the following: - Apparel manufacturing units - Fashion designer boutiques - Fashion startups - Accessory manufacturing units - Retail stores - Textile / Apparel Testing Laboratories			120	100	1, 2, 3, 4, 5, 6	1, 2, 3	7	Employability, Entrepreneurship, Skill Development	Global	Gender, Environment Sustainability, Human Values, Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	Student internship programme offered by universities								
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As per SOP point no. 3.4.8, Pg. No. 31 & 33 of 116 the grade/marks for internship/apprenticeship/OJT shall be provided by the industry supervisor and faculty guide in the ratio of 60% and 40% respectively.

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Third Year

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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PROGRAMME SPECIFIC OUTCOMES THIRD YEAR (LEVEL 5.5)

- PSO 1: Develop the ability to design optimal layouts that maximize workflow and minimize waste in garment production facilities.
- PSO 2: Develop comprehensive techpacks that include detailed product specifications, materials, construction techniques, and quality standards.
- PSO 3: Develop a product from concept through to market launch, understanding the critical stages involved.
- PSO 4: Develop integrated marketing and visual merchandising strategies that effectively communicate the brand message across various channels.
- PSO 5: Understand the role of e-commerce and digital platforms in expanding market reach and enhancing customer experiences.
- PSO 6: Develop and deliver engaging presentations that effectively convey research findings, project outcomes, or industry insights.
- PSO 7: Demonstrate knowledge of various testing methods for textiles and finished garments, including durability, colorfastness, and fit.
- PSO 8: Create a comprehensive business plan that outlines the vision, mission, strategy, and financial forecast for a fashion-related venture.
- PSO 9: Develop foundational skills in designing research projects relevant to the apparel industry, including qualitative and quantitative methods, such as surveys, interviews, and observational studies, tailored to the apparel context.
- PSO 10: Gain hands-on experience in various aspects of the apparel industry, enhancing theoretical knowledge with real-world applications.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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THIRD YEAR
COURSES OFFERED BY
FASHION AND APPAREL TECHNOLOGY PROGRAMME

Year (Level)	Semester	Course Name	Credit	Course type
III (5.5)	5	Plant Layout in Apparel Industry	4(0+4)	Major 11
		Orientation to Research	4(4+0)	Major 12
		Fashion Product Development	4(0+4)	Major 13
		2 minor courses from a basket of 12 courses		
		Fashion Branding	4(4+0)	Minor 4
		Fashion Supply Chain Management	4(4+0)	Minor 5
		Entrepreneurship	4(4+0)	Minor 6
		Teckpach Development	2(0+2)	SEC 5
		TOTAL	22 (12+10)	
	6	Communication Skills and Paper Presentation	4(1+3)	Major 14
		Cost Analysis in Apparel Industry	4(3+1)	Major 15
		Testing & Quality Control in Apparel Industry	4(2+2)	Major 16
		1 minor courses from a basket of 6 courses		
		Entrepreneur Development	4(4+0)	Minor 7
		Role of Information Technology in Apparel Industry	2(2+0)	AEC 5
		Internship in Apparel Industry	4(0+4)	SEC 6
		TOTAL	22(12+10)	
Exit III: Award of UG Degree in Major Course with 132 credits and Internship in core discipline OR continue with Major and Minor course for next NCrf credit level				

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5										
Year	III	Plant Layout in Apparel Industry (Major 11)	Credits / Hours per semester				4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester			
Semester	I	Year of Introduction: 2023-24 Year of Syllabus Revision:	Maximum Marks/ Minimum Marks				100 Marks / 36 Marks			
Mode of Transaction		Practical								
Course Outcome (CO) CO1 Learn various components and different types of layout used in an apparel industry. CO2 Impart hand on experience to gain understanding the floor planning and management. CO3 Enable the students to work out flowchart and layout for various departments for apparel manufacturing unit. CO4 Understand different services, work place design, output analysis and material handling.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/ Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Capacity Planning and line balancing: 1. Operator performance 2. Work in process (WIP) 3. Operation bulletin 4. Balancing and Steps to balance the line 5. Efficiency 6. Cycle checks		18	15	1, 2, 3	1	2,1	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
II.	Layout for different type of manufacturing and production system 1. Type of layout: vertical and horizontal 2. Manufacturing systems 3. Production systems		12	10	1, 2, 3	1	1	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
III.	Introduction to material handling 1. Importance and objective of material handling 2. Types of material handling equipment; 3. Specialized material handling equipment’s / systems related to the apparel industry		12	10	2, 3, 4, 5, 6	2	1	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
IV.	Workstation design 1. location standards for area requirements per person per workstation 2. Understanding of good layout- interior spaces in terms of lighting, ventilation, flow patterns, clearances		12	10	2, 3, 4, 5, 6	2	1	Employability, Entrepreneurship,	Local, National	Gender, Environment and Sustainability, Human Values and

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

V.	List of activities in an apparel manufacturing unit and their space analysis 1. Factory area- storage of fabrics to warehouse; Processes checking, cutting, sewing, finishing; Areas for production personnel; 2. Utilities- canteen/crèche/toilets/drinking water, etc.; 3. Administrative area; Reception; Offices- managers / supervisor's office; etc.	30	25	2, 3, 4, 5, 6	2	1	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
VI.	Product and required output analysis 1. Man, machine and area calculation; Storage requirements	24	20	2, 3, 4, 5, 6	4	1	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics
VII.	Health & Safety Issues – Guidelines & Compliances	12	10	2, 3, 4, 5, 6	4	1	Employability, Entrepreneurship	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION

CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	15	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Viva/Oral examination	25	Oral	Individually or in small groups.	Practical experience towards job interview situation.
Mid semester examination, Lab work	15	Practical examination	Component of working with one's hand	Keep the students on the task.	Viva/Oral examination	25	Product presentation	Individually or in small groups.	Practical experience towards job interview situation.
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.					
Attendance	10	-	-	-					
Total	50				Total	50			

Reference Books

1.	Babu, V., R. (2012). <i>Industrial Engineering in Apparel Production</i> . New Delhi: Woodhead Publishing India Pvt. Ltd.
2.	Bheda, R. (2003). <i>Managing Productivity in the Apparel Industry</i> . New Delhi: CBS Publishers & Distributors.
3.	Carr, H. & Latham, B. (2008). <i>Technology of Clothing Manufacture - 4th Edition</i> . Oxford: Blackwell Publishing.
4.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.
5.	Nayak, R., & Padhye, R. (2015). <i>Garment Manufacturing Technology</i> . New Delhi: Woodhead Publishing.

B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
---	----------------------	----------------

Year	III	Orientation to Rresearch (Major 12)	Credits / Hours per week					4 (4+0) 4 hrs/week Theory = 60 hrs Total = 60 hrs/week		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum marks					100 Marks/ 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Understand the fundamental principles and types of research CO2 Develop skills in literature review and source evaluation CO3 Understand research design, methods, and tools CO4 Recognize the importance of ethical practices in research CO5 Introduced to data analysis and interpretation CO6 Gain the ability to create a basic research proposal or report.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I	Introduction to Research and process 1. Definition and Importance of Research 2. Objectives and Applications of Research 3. Types of Research (Basic, Applied, Qualitative, Quantitative) 4. Characteristics of Good Research 5. Steps in the Research Process 6. Identifying Research Problems 7. Framing Research Questions and Hypotheses 8. Importance of Clear Objectives		12	20	1,2	1	9	Skill Development	Local, National, Regional, Global	Professional Ethics
II	Literature Review, Research Design and Methodology 1. Purpose of a Literature Review 2. Finding and Evaluating Academic Sources 3. Citation and Referencing Basics (e.g., APA, MLA) 4. Avoiding Plagiarism 5. Introduction to Research Designs (Descriptive, Experimental, Exploratory) 6. Sampling Techniques and Population Selection 7. Data Collection Methods (Surveys, Interviews, Experiments) 8. Tools and Technologies for Research		12	20	1,2	2,3	9	Skill Development	Local, National, Regional, Global	Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

III	Data Analysis and Interpretation and Ethics in Research 1. Basics of Data Collection and Organization 2. Qualitative vs. Quantitative Data Analysis 3. Overview of Statistical Tools (e.g., SPSS, Excel) 4. Presenting Data: Tables, Charts, Graphs 5. Importance of Research Ethics 6. Informed Consent and Confidentiality 7. Avoiding Bias and Misrepresentation of Data 8. Institutional Review Boards (IRBs)	12	20	1,2	4,5	9	Skill Development	Local, National, Regional, Global	Professional Ethics
IV	Writing and Presenting Research 1. Structuring a Research Proposal or Paper 2. Abstract, Introduction, Methodology, Results, Discussion, Conclusion 3. Effective Presentation of Research Findings 4. Formatting and Style Guidelines	12	20	1,2,3	6	9	Skill Development	Local, National, Regional, Global	Professional Ethics
V	Practical Application and Feedback 1. Developing a Mini Research Proposal 2. Peer Review and Feedback Sessions 3. Mock Presentation of Research	12	20	1,2,3,4	6	9	Skill Development	Local, National, Regional, Global	Professional Ethics

SUGGESTED EVALUATION

CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination Class test	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class assignment	15	Written	With defined time	Student's performance to make decision					
Home assignment	10	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					
Attendance	05	-	-	-					
Total	50				Total	50			

Reference Books

1	Kothari, C. R., & Garg, G. (2019). Research methodology: Methods and techniques (4th ed.). New Age International Publishers.
2	Mishra, R. C. (2017). Educational research. APH Publishing Corporation.
3	Pandey, P., & Pandey, M. M. (2021). Research methodology: Tools and techniques (2nd ed.). Bridge Center.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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4	Ranjit, K. (2020). Research methodology: A practical guide for social sciences. Sage India
5	Sharma, R. D. (2018). Research methodology in social sciences. Kalyani Publishers.
6	Singh, Y. K. (2016). Fundamentals of research methodology and statistics. New Age International Publishers.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5										
Year	III	Fashion Product Development (Major 14)	Credits / Hours per semester					4 (0+4) Credits / 8 Hours per week (Practical: 120 hours) Total: 120 hours/semester		
Semester	I	Year of Introduction: 2023-24 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode of Transaction		Practical								
Course Outcome (CO) CO1 Provide students with a comprehensive understanding of the fashion product development process from concept to production. CO2 Equip students with skills to design, plan, and manage fashion products. CO3 Explore the integration of market trends, design, technology, and sustainability in product development. CO4 Prepare the students for roles in product management, design, and apparel manufacturing										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Introduction to Fashion Product Development 1. Overview of product development in the fashion industry. 2. Key players: Designers, merchandisers, product developers, and manufacturers. 3. Product lifecycle: Concept to consumer. 4. Importance of collaboration and cross-functional teams.		12	10	2,3,4	1	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
II.	Market Research and Trend Analysis 1. Understanding target markets and consumer behavior. 2. Conducting market research: Tools and methods. 3. Interpreting trends: Colors, fabrics, and silhouettes.		18	15	2,3,4,5	3	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
III.	Design and Development Process 1. Design ideation: Concept boards, mood boards, and inspiration sources. 2. Garment sketching: Flat sketch 3. Selecting fabrics, trims, and materials. 4. Creating prototypes and samples. 5. Balancing aesthetics, functionality, and cost considerations.		24	20	2,3,4,5, 6	2,4	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
IV.	Production Planning and Quality Control 1. Overview of production processes: Sampling, bulk production, and finishing. Quality assurance: Standards and testing methods. 2. Managing timelines and minimizing production delays.		12	10	2,3	1	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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	3. Sustainable production practices and waste management.								
V.	Technical Development and Specification 1. Introduction to tech packs and their importance in production. 2. Key components of a tech pack: Flat sketches, measurements, grading, and construction details. 3. Material specifications: Fabric, trims, and labels	24	20	2,3,4,5	2,4	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
VI.	Costing and Sourcing 1. Costing basics: Materials, labor, overheads, and profit margins. 2. Importance of sourcing: Fabrics, trims, and manufacturing partners. 3. Sustainable and ethical sourcing practices.	12	10	2,3,4,5	1	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
VII.	Marketing and Product Launch 1. Developing a marketing plan for fashion products. 2. Packaging, branding, and presentation of products. 3. Retail and online strategies for product launch.	18	15	4,5	4	3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION										
CCE (50% IA)					SEE (50% UA)					
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective	
Lab work	20	Practical	Component of working with one's hand	Keep the students on the task	Viva/Oral examination	25	Oral	Individually or in small groups.	Practical experience towards job interview situation.	
Craft work	20	Practical	Component of working with one's hand	Encourage applications of concept learnt	Viva/Oral examination	25	Product presentation	Individually or in small groups.	Practical experience towards job interview situation.	
Attendance	10	-	-	-						
Total	50				Total	50				

Reference Books	
1	Gokalp, E. et al. (2019). <i>Industry 4.0 - Revolution in clothing and apparel factories: Apparel 4.0</i> . METU Informatics Institute. Ankara, Turkey.
2	Rahman, M., Mashud, M., & Rahman M. (2023). <i>Advanced technology in textiles: fibre to apparel</i> . Singapore: Springer Nature Singapore Pte Ltd.
3	Nayak, R. & Padhye, R. (2018). <i>Automation in garment manufacturing</i> . United Kingdom: Woodhead Publishing Ltd.
4	Hu, J. (2011). <i>Computer technology for textile and apparel</i> . United Kingdom: Woodhead Publishing Ltd.
5	Gilchrist, A. (2016). <i>Industry 4.0: The industrial internet of things</i> . New York: Springer Science.
6	Surjit, R., Rathinamoorthy, R., & Vardhini, K. (2016). <i>ERP for textiles and apparel industry</i> . New Delhi: Woodhead Publishing Ltd.

B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5				
Year	III	Fashion Branding (Minor 4)	Credits / Hours per week	04 (4+0) / 04 4 (4+0) 4 hrs/week Total = 60 hrs/week

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Apply branding concepts to create a personal/fashion brand CO2 Demonstrate the value and importance of the brand for the company and the customer CO3 Define the branding process and develop a roadmap for creating a brand										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Understanding the Brand 1. The brand 2. Brand logic 3. Definition of brand 4. Brand issue		12	20	1, 2	1	4,5	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
II.	Branding Process 1. The brand decision and positioning, Communicating, Launching, a. Evaluation of brand b. Brand audit c. Growth strategies d. Brand repositioning e. Relaunching and Revitalization f. Brand Failure g. Brand growth, economic downturns,		15	25	2,3	1,2	4,5	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
III.	The Fashion Brand 1 Luxury Fashion Brand- Objective, definition, branding, brand decision, vision, product mix, brand identity, Positioning strategy, brand communication, brand evaluation and audit, brand growth, economic downturns, star luxury brand 2 Mass market brands- Premium brand, private label 3 Retail brands –Consumer, concept, merchandise, price, location, service, experience, communication, growth, e-Tailing		18	30	2,3	2	4,5	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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IV.	Age of interactive wireless and virtual brands 1. Interactive brand: 2. mass communication 3. Wireless brand: RFID and mobile technologies 4. M-branding 5. Beaming 6. Audio targeting 7. The power of I	9	15	2,3	3	4,5	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
V.	Redesigning the brand 1. The impact of new technologies and model 2. Micro-brands 3. Experiential branding 4. Positioning 5. Image.	6	10	4,5	3	4,5	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class Test	10	Written	Traditional essay type	Fixed date force students to learn	Semester exam	50	Written	Traditional essay type	For depth and planned preparation
Mid semester class test	25	Written	Traditional essay type	For depth and planned preparation					
Case study	10	Written	Analyze a given case (real or fictional)	To assess thinking, value and attitude					
Attendance	05	-	-	-					
Total	50				Total	50			

Reference Books	
1.	Abellam, M. & Minquet, J., M. (2010). <i>Fashion Branding</i> . London: Trans-Atlantic Publications.
2.	Brennan, B. & Schafer, L. (2012). <i>Branded: How Retailers Engage Consumers with Social Media and Mobility</i> . New Jersey: Hoboken & SAS Business.
6.	Kendall, G. (2009). <i>Fashion Brand Merchandising</i> . New York: Fairchild Books.
7.	Meadows, T. (2007). <i>How to Step up and Run a Fashion Label</i> . London: Laurance King Publishing.
8.	Okonkwo, U. (2007). <i>Luxury Fashion Branding: Trends, Tactics, Techniques</i> . London: Palgrave Macmillan.
9.	Tangate, M. (2012). <i>Fashion Brands: Branding Style from Armani to Zara</i> . London: Kogan.

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5										
Year	III	Fashion Supply Chain Management (Minor 5)	Credits / Hours per week					04 (4+0) / 04 4 (4+0) 4 hrs/week Total = 60 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum marks					100 marks/ 36 marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Understand the principles and components of the fashion supply chain. CO2 Learn the intricacies of managing supply chain operations specific to the fashion and apparel industry. CO3 Explore strategies for procurement, inventory, and logistics in a globalized fashion market. CO4 Recognize the importance of sustainability and ethical practices in the fashion supply chain.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Introduction and structure of Fashion Supply Chain Management 1. Overview of Supply Chain Management (SCM) 2. Key Elements of the Fashion Supply Chain 3. Importance of SCM in the Fashion Industry 4. Challenges in Managing Fashion Supply Chains 5. Key Players: Suppliers, Manufacturers, Distributors, Retailers, and Customers 6. Relationships and Communication Across the Supply Chain 7. Vertical vs. Horizontal Supply Chains 8. Role of Third-Party Logistics (3PL) Providers		15	25	1,2	1,2	10	Employability, Entrepreneurship	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

II.	Procurement, Sourcing and Inventory management in Fashion 1. Raw Material Sourcing: Fabric, Trims, and Accessories 2. Vendor Selection and Evaluation 3. Global Sourcing: Advantages and Challenges 4. Inventory Types: Raw Materials, Work-in- Progress, Finished Goods Inventory Control Techniques: JIT (Just-in-Time), EOQ (Economic Order Quantity) 6. Managing Seasonal Demand and Overstock Issues 7. Apparel Manufacturing Process Flow 8. Managing Lead Times and Reducing Delays	15	25	1,2	2,3	10	Employability, Entrepreneurship	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
III.	Distribution and Retailing in Fashion 1. Transportation and Warehousing in the Fashion Industry 2. Retail Supply Chain Strategies (Omni channel, E- commerce, and Physical Stores) 3. Visual Merchandising and Stock Replenishment Systems 4. Reverse Logistics (Returns and Recycling)	9	15	1,2,3	1,2	10	Employability, Entrepreneurship	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
IV.	Technology in Fashion Supply Chain 1. Role of Digital Tools: RFID, Block chain, and AI in SCM 2. Automation and Robotics in Warehousing 3. Predictive Analytics for Demand Forecasting 4. Role of Software (SAP, Oracle SCM) in Supply Chain Management	9	15	2,3,4	1,2	10	Employability, Entrepreneurship	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
V.	Global Trends and Innovations in Fashion SCM 1. Impact of Globalization on the Supply Chain 2. Fast Fashion vs. Slow Fashion Supply Chains 3. Impact of Geopolitical Issues on Sourcing and Logistics 4. Future Trends: Smart Fabrics, On-Demand Manufacturing	12	20	2,3,4	1,2	10	Employability, Entrepreneurship	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class Test	10	Written	Traditional essay type	Fixed date force students to learn	Semester exam	50	Written	Traditional essay type	For depth and planned preparation
Mid semester class test	25	Written	Traditional essay type	For depth and planned preparation					
Case study	10	Written	Analyze a given case (real or fictional)	To assess thinking, value and attitude					
Attendance	05	-	-	-					
Total	50				Total	50			

Reference Books	
1	Bruce, M., Daly, L., & Towers, N. (2004). Fashion marketing: Contemporary issues. Elsevier Butterworth-Heinemann.
2	Frings, G. S. (2018). Fashion: From concept to consumer (11th ed.). Pearson.
3	Gupta, A. (2020). *Textile and apparel supply chain management
4	Hines, T., & Bruce, M. (2007). Fashion supply chain management: A systems approach to managing the apparel industry. Routledge.
5	Jackson, T., & Shaw, D. (2009). Mastering fashion buying and merchandising management. Palgrave Macmillan.
6	Jones, R. M., & Hayes, S. G. (2004). Apparel product development. Wiley-Blackwell.
7	Rosy, B. M. (2015). Fashion supply chain management using radio frequency identification (RFID) technologies. Elsevier.
8	Tyler, D., Heeley, J., & Bhamra, T. (2006). Supply chain management in textiles: A practical approach. Woodhead Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Second Year – Level 5.5										
Year	III	Entrepreneurship (Minor 7)	Credits / Hours per week					4(4+0)4 hrs/week Theory = 60 hrs Total = 60 hrs/week		
Semester	II	Year of Introduction: 2023- 2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1 Analyze entrepreneurial opportunities via market trends, customer needs, and competitor landscapes. CO2 Develop a full business plan, including business modeling, marketing, forecasting, and workflow planning. CO3 Compare and select financing avenues, and articulate strategies in pitch-ready formats. CO4 Demonstrate entrepreneurial mindset with practical skills in communication, negotiation, networking, and adaptability.										
Unit No.	Topic		Con tac t Ho urs	Weightag e (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
THEORY										
I.	Introduction to Entrepreneurship 1. Concept, functions, need & importance of entrepreneurship 2. Myths, pros & cons of entrepreneurship 3. Entrepreneur vs. manager vs. intrapreneur 4. Types: traditional, technological, social, women,		09	15	1, 2	1	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	corporate (intrapreneurs)								
II.	Opportunity Recognition & Evaluation 1. Opportunity sensing & environment scanning 2. Trend spotting, problem identification, unmet needs exploration 3. Idea generation techniques: brainstorming, SCAMPER, design thinking 4. Feasibility assessment: market, technical, financial	12	20	1, 2	1,2	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
III.	Business Planning & Modelling 1. Business Model Canvas: components & customization 2. Forms of organization: sole proprietorship, partnership, LLP, franchise, corporate 3. Marketing strategy: 4Ps, segmentation, branding, distribution channels	15	25	1, 2	2,3	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

	4. Financial projections: income statement, cash flow, breakeven, ROI & ROE 5. Writing business plan & project report: structure & environment scanning								
IV.	Financing & Funding Strategies 1. Resource types: human, capital, physical & intangible 2. Estimating financial requirements, working vs fixed capital 3. Funding options: debt, equity, VC, angel, crowdfunding, IPO 4. Pitch development: storytelling, presentation structure, investor targeting 5. Financial management: budgeting, cost control, ratios, risk-return analysis	12	20	1, 2	3	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
V.	Growth Strategies & Entrepreneurial Skills 1. Scaling techniques: growth hacking, franchising, M&A 2. Networking: ecosystem mapping, mentor & team building 3. Negotiation & communication skills in deals 4. Adaptability & resilience: handling failure, pivoting, risk management	12	20	1, 2	3,4	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	5. Social entrepreneurship: impact measurement, ethics & sustainability 6. Institutional support: incubators, accelerators, MSME support agencies								
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SUGGESTED EVALUATION										
CCE (50% IA)					SEE (50% UA)					
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective	
Mid semester examination Class test	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation	
Class assignment	15	Written	With defined time	Student's performance to make decision						
Class assignment	10	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills						
Attendance	05	-	-	-						
Total	50				Total	50				

Reference Books

1.	Kuratko, D. F., & Rao, T. V. (2023). <i>Entrepreneurship: A South Asian Perspective</i> (2nd ed.). Cengage.
2.	Barringer, B. R., & Ireland, R. D. (2021). <i>Entrepreneurship: Successfully Launching New Ventures</i> (6th ed.). Pearson.
3.	Charanthimath, P. M. (2020). <i>Entrepreneurship Development and Small Business Enterprises</i> (3rd ed.). Pearson.
4.	Holt, D. H. (2018). <i>Entrepreneurship: Theory, Process, Practice</i> (10th ed.). Cengage.
5.	Mohanty, S. K. (2017). <i>Fundamentals of Entrepreneurship</i> . New Delhi: PHI Learning Pvt. Ltd.
6.	Drucker, P. F. (2015). <i>Innovation and Entrepreneurship: Practices and Principles</i> . New York: Routledge Classics.
7.	Kumar, A. (2012). <i>Entrepreneurship: Creating and Leading an Entrepreneurial Organization</i> . New Delhi: Pearson India Ltd.

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5										
Year	III	Tech pack Development (SEC 5)	Credits / Hours per semester					2 (0+2) Credits /4 Hours per week Practical: 60 hours) Total: 60 hours/semester		
Semester	I	Year of Introduction: 2023-24 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					50 Marks / 18 Marks		
Mode of Transaction		Practical								
Course Outcome (CO) CO1 Provide an understanding of the product design process in the fashion and apparel industry CO2 Equip students with skills to create technical specification documents (tech packs) CO3 Familiarize students with industry-standard tools and practices for product development CO4 Integrate innovation in product design and development.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development(SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
Practical										
I.	Technical Specification and Tech Pack Basics 1. Introduction to tech pack and its importance in the industry. 2. Key components of a tech pack: 3. Technical drawings and flat sketches. 4. Measurements, grading, and size charts. 5. Fabric and trim specifications. 6. Grading and size adjustments for different markets 7. Construction details and sewing instructions. 8. Packaging and labelling requirements.		16	26	2,3	2,3	2,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability Human Values and Professional Ethics
II.	Material Selection and Testing 1. Fabric properties and their role in design. 2. Selection of trims, accessories, and embellishments. 3. Basics of material testing and quality standards.		10	15	1,2,3	3	2,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

III.	Manufacturing and Communication 1. Role of the tech pack in the production process. 2. Effective communication with manufacturers and suppliers. 3. Quality assurance and pre-production sampling.	10	15	2,4	3	2,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
IV.	Product research for Tech pack development 1. Research and present a trend analysis for a specific apparel product. 2. Create a product development timeline for a specific apparel line.	12	20	3,4,6	3,4	2,3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
V.	Tech pack development 1. Develop a basic tech pack for a simple garment (e.g., T- shirt). 2. Prepare a material board for a garment collection 3. Create a complete tech pack for a multi-component garment (e.g., a jacket).	12	24	3,4,6	3, 4	2,3	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Lab work	10	Practical	Component of working with one's hand	Keep the students on the task	Viva/Oral examination	25	Oral	Individually or in small groups.	Practical experience towards job interview situation.
Craft work	10	Practical	Component of working with one's hand	Encourage applications of concept learnt					
Attendance	05	-	-	-					
Total	25				Total	25			

Reference Books	
1.	Aldrich, W. (2022). Metric pattern cutting for women's wear (7th ed.). Wiley.
2.	Cooklin, G., Hayes, S. G., & Fairclough, J. (2015). Cooklin's garment technology for fashion designers. Wiley-Blackwell.
3.	Glock, R. E., & Kunz, G. I. (2022). Apparel manufacturing: Sewn product analysis (5th ed.). Pearson.
4.	Hethorn, J., & Ulasewicz, C. (2020). Sustainable fashion: Why now? A conversation about issues, practices, and possibilities (2nd ed.). Bloomsbury Publishing.
5.	Keiser, S. J., & Garner, M. B. (2023). Beyond design: The synergy of apparel product development (5th ed.). Bloomsbury Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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 सत्यं शिवां सुन्दरम् Estd. 1949		Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda NAAC Accredited "A+" Grade				Academic Year			2025-26		
B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5											
Year		III	Communication Skills and Paper Presentation (Major 14)			Credits / Hours per semester			4 (1+3) Credits / 7 Hours per week (Theory: 15 hours, Practical: 90 hours) Total: 105 hours/semester		
Semester		II	Year of Introduction: 2023-2024 Year of Syllabus Revision:			Maximum Marks / Minimum Marks			100 Marks / 36 Marks		
Mode of Transaction			Theory and Practical								
Course Outcome (CO) CO1 Develop effective communication skills for personal, academic, and professional contexts. CO2 Enhance students’ writing and presentation skills for research and academic papers. CO3 Familiarize students with the structure, style, and methods of technical and research communication. CO4 Build confidence in public speaking, professional communication, and academic discourse.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
Theory											
I.	Fundamentals of Communication 1. Introduction to communication: Process, types, and barriers. 2. Verbal and non-verbal communication. 3. Importance of communication in the fashion and apparel industry. 4. Active listening and critical thinking skills.			15	25	1,2	1	6	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics
Practical											
II.	Professional and Business Communication 1. Writing professional emails, cover letters, and reports. 2. Basics of business communication: Clarity, tone, and brevity. 3. Communication for teamwork and collaboration. 4. Conflict resolution and negotiation skills.			18	15	1,2,3	1,2,4	6	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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III.	Research Writing and Paper Structuring 1. Fundamentals of academic and technical writing. 2. Components of a research paper: Abstract, introduction, literature review, methodology, results, discussion, and conclusion. 3. Referencing and citation styles (APA, MLA, etc.). 4. Avoiding plagiarism and ensuring academic integrity.	24	20	2,3,4	2,3	6	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics
IV.	Presentation Skills 1. Preparing effective PowerPoint presentations: Design, structure, and visuals. 2. Public speaking skills: Body language, voice modulation, and engagement techniques. 3. Techniques to manage stage fear and build confidence. 4. Handling Q&A sessions during presentations.	24	20	2,3,4,6	2,3,4	6	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics
V.	Technical Paper Presentation 1. Selecting a topic and conducting background research. 2. Writing, revising, and finalizing a technical paper. 3. Presenting the paper: Structuring content for oral delivery. 4. Using visual aids and multimedia effectively.	24	20	2,3,4,6	2,3,4	6	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Human Values and Professional Ethics

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Lab work	20	Practical	Component of working with one's hand	Keep the students on the task	Integrated	50	Integrated mode	Individually or in small groups.	Learn from others presentation.
Craft work	20	Practical	Component of working with one's hand	Encourage applications of concept learnt					
Attendance	10	-	-	-					
Total	50				Total	50			
Reference Books									
1.	Alley, M. (2013). The craft of scientific writing (4th ed.). Springer.								
2.	Anderson, P. V. (2017). Technical communication: A reader-centered approach (9th ed.). Cengage Learning.								
3.	Guffey, M. E., & Loewy, D. (2022). Essentials of business communication (12th ed.). Cengage Learning.								
4.	Lucas, S. E. (2020). The art of public speaking (13th ed.). McGraw Hill.								
5.	McCroskey, J. C. (2015). An introduction to rhetorical communication: A Western rhetorical perspective (10th ed.). Routledge.								

Bloom's Taxonomy (BT) Levels: 1. Remember 2. Understand 3. Application 4. Analysis 5. Evaluation 6. Creation

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5										
Year	III	Cost Analysis of Apparel Industry (Major 15)	Credits / Hours per semester				4 (3+1) Credits / 5 Hours per week (Theory: 45 hours, Practical: 30 hours) Total: 75 hours/semester			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks				100 Marks / 36 Marks			
Mode of Transaction		Theory and Practical								
Course Outcome (CO) CO1 Impart basic knowledge of costing methods in apparel manufacturing CO2 Enable students to calculate the product cost of various apparel products based on its values CO3 Understand the basic concepts of GST in apparel industry CO4 Make the students understand about the various factors affecting retail apparel cost										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ SD (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
Theory										
I.	Introduction to costing 1. Role of costing 2. Costing timeline 3. Costing terms and vocabulary 4. Traditional apparel costing: First cost, markup; Factors affecting costing		9	15	1, 2	1	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
II.	Global Production Sourcing and Costing 1. Effects of global production on costing 2. International costing terms 3. Direct factory sourcing 4. Buying office and sourcing agent fees 5. Freight forwarding charges 6. Custom clearance fees; Duty.		9	15	1, 2, 3, 5	2	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
III.	Target Market and Private-Label Pricing 1. Identifying target customer 2. Types of pricing; Competitor research 3. Target market costing 4. Value-based vs. cost-based pricing 5. Private label pricing		9	15	1, 2, 3, 5	2	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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IV.	2. Omni-channel retailing 3. Discounts; Markdowns; Chargebacks 4. Meeting the customer's needs 5. Winning the profit game 6. Cost cutting in fabric and trims 7. Negotiations with vendors to achieve profit margin 8. Indirect cost-cutting.	9	15	1, 2, 3, 5	3	8,10	Employability, Entrepreneurship,	Local, National, Regional, Global	Environment and Sustainability, Human
	Goods and Services Tax (GST) 1. Introduction to GST 2. Stages of production 3. Value addition 4. Journey of GST in India 5. Objectives of GST; Advantages of GST; Components of GST 6. Tax laws before GST 7. GST and price reduction 8. New compliances under GST 9. GST in apparel industry	9	15	1, 2, 3, 5	2	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
Practical									
	Material cost 1. Fabric costing for woven and knitted products 2. weaving cost 3. Costing of fabric construction 4. fabric cost per meter, fabric cost/garment, yarn cost, fabric cost per kg	12	10	1, 2, 3, 5	2	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
	5. Trims and accessories cost: cost of trims (labels, tags, buttons, etc.), accessories (hanger, inner board, poly bag, buttons, etc.), CMT charges, other charges (print, embroidery, etc.)	12	10	1, 2, 3, 5	3	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics
	Labor and manufacturing cost 1. Labor cost: parameters of labor costing, labor cost budgeting and variances, wage rate and piece rate: 2. Comparative analysis, incentive plans; Manufacturing cost: 3. Classification of overheads, allocation and appointment, calculation of prime cost; General operating expenses. Retail pricing 1. Markups/markdown calculation 2. Export pricing 3. Freight costing and freight cost calculations	6	5	1, 2, 3, 5	3	8,10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Environment and Sustainability, Human Values and Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class test									
Class assignment	15	Written	With defined time	Student's performance to make decision					
Home assignment	10	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					
Attendance	05	-	-	-					
Total	50				Total	50			
Reference Books									
1.	Clodfelter, R. (2015). <i>Retail Buying: From Basics to Fashion</i> . New York: Fairchild Publications Inc.								
2.	Glock, R. E., & Kunz, G. I. (2005). <i>Apparel Manufacturing: Sewn Product Analysis - 4th Edition</i> . Chennai: Pearson India.								
3.	Horngren, C. T., Datar, S. M., & Rajan, M. V. (2015). <i>Cost Accounting - 15th Edition</i> . Chennai: Pearson India.								
4.	Jeffrey, M. & Evans, N. (2011). <i>Costing for the Fashion Industry</i> . Oxford: Berg Publishers.								
5.	Lezama, M., Webber, B., & Dagher, C. (2004). <i>Sourcing Practices in Apparel Industry</i> . London: Commonwealth Secretariat.								
6.	Nayak, R., & Padhye, R. (2015). <i>Garment Manufacturing Technology</i> . New Delhi: Woodhead Publishing.								

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5											
Year	III	Testing & Quality control in apparel industry (Major-16)			Credits / Hours per week			4 (2+2) 6 hrs/week Theory = 30 hrs, Practical = 60 hrs Total = 90 hrs/week			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:			Maximum Marks / Minimum Marks			100 Marks / 36 Marks			
Mode of Transaction		Lecture and Practical									
Course Outcome (CO) CO1 Make the students understand the importance and application of textile testing CO2 Understand the effect of moisture on various properties of textiles CO3 Enable the students to understand the testing of yarns and fabrics used for apparels and its end uses CO4 Help the students understand the colorfastness properties of textiles CO5 Demonstrate the yarn and fabric testing procedures followed in an industry											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
Theory											
I	Introduction to textile testing 1. Reasons for textile testing 2. Standardization of testing 3. Sampling 4. Measurement of test results			3	5	1, 2	1	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability (ES), Professional Ethics (PE)
II	Textiles and moisture 1. Effect of moisture on physical properties 2. Atmospheric moisture 3. Regain and moisture content 4. Control of testing room atmosphere			3	5	1, 2	2	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability, Professional Ethics
III	Yarn tests 1. Linear density 2. Twist 3. Yarn evenness 4. Yarn hairiness			3	5	1, 2	3	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability, Professional Ethics

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	Fabric tests 1. Tensile strength a. Tensile terminology b. Factors affecting tensile testing c. Strip test and grab test 2. Tear strength 3. Bursting strength 4. Stretch and recovery properties 5. Seam strength 6. Dimensional stability 7. Serviceability a. Snagging b. Pilling c. Abrasion resistance d. Wearer trials 8. Comfort properties a. Thermal comfort b. Moisture transport c. Sensorial comfort d. Water absorption e. Water repellency 9. Fabric handle a. Bending length b. Stiffness c. Drape d. Crease recovery e. Fabric thickness	15	25	1, 2	3	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability, Professional Ethics
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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V	Colourfastness tests 1. Introduction 2. Scales for visual comparison of colors 3. Evaluation of colorfastness to a. Washing or laundering b. Dry cleaning c. Light d. Crocking e. Perspiration f. Abrasion (frothing) g. Heat h. Burnt gas fumes i. Bleaching j. Water k. Chlorinated pool l. Sea water m. Water spotting	6	10	1, 2	4	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability, Professional Ethics
Practical									
VI	1. Yarn testing a. Yarn count b. Yarn twist c. Yarn strength 2. Fabric testing a. Fabric construction using pick glass b. Beesley's balance c. Crimp d. Cover factor e. Thickness f. Tensile strength – Strip test g. Tearing strength h. Seam strength i. Pilling j. Abrasion k. Drape l. Stiffness m. Crease recovery n. Shrinkage o. Air permeability	60	50	2, 3, 4, 5	5	7	Skill Development	Local, National, Regional, Global	Environment and Sustainability, Professional Ethics
SUGGESTED EVALUATION									

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination Class test	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class assignment	15	Written	With defined time	Student's performance to make decision					
Home assignment	10	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					
Attendance	05	-	-	-					
Total	50				Total	50			
Reference Books									
1.	Booth, J. E. (1996). <i>Principles of Textile Testing – 3rd Edition</i> . New York: CBS Publishers & Distributors Pvt. Ltd.								
2.	Bubonia, J. E. (2014). <i>Apparel Quality: A Guide to Evaluating Sewn Products</i> . London: Bloomsbury Publishing.								
3.	Das, S. (2010). <i>Quality Characterization of Apparel</i> . New Delhi: Woodhead Publishing India Pvt. Ltd.								
4.	Kadolph, S. J. (2007). <i>Quality Assurance for Textiles and Apparel – Second ed</i> . London: Bloomsbury Publishing.								
5.	Kadolph, S. J., & Langford, A. L. (2006). <i>Textiles – 10th Edition</i> . New Jersey: Prentice Hall.								
6.	Mehta, P. V. (2012). <i>Quality Management Handbook for the Apparel Industry</i> . New Delhi: New Age International Pvt. Ltd.								

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	B. Sc. (F.T.) Fashion and Apparel Technology Second Year – Level 5.5										
Year	III		Entrepreneur Development (Minor 7)	Credits / Hours per week					4(4+0)4 hrs/week Theory = 60 hrs Total = 60 hrs/week		
Semester	II		Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks			100 Marks / 36 Marks		Maximum Marks / Minimum Marks		
Mode Of Transaction			Lectures								
	Course Outcome (CO) FGT CO1 Acquaint the students with an in-depth knowledge source for an intending entrepreneur CO2 Enable students gain perspective of the entrepreneurial functions CO3 Understand the enterprise management and development process CO4 Aid students to adopt and implement the entrepreneurial functions in practice										
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
THEORY											

I.	Entrepreneur and entrepreneurship 1. The concept of entrepreneur; Distinction between manager and entrepreneur 2. Qualities of a successful entrepreneur 3. Functions of an entrepreneur 4. Types of entrepreneurs 5. The concept of Entrepreneurship 6. Nature and characteristics of entrepreneurship 7. Entrepreneurship and intrapreneurship	6	20	1, 2	1	8	Employability, Entrepreneurship, Skill Development	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global
I.	Enterprise start-up 1. Business system: an introduction; Nature scope and types of business system 2. History and evolution of business system 3. Business ownership	6	20	1, 2	1	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
---	----------------------	----------------

II.	Enterprise financing 6. Institutional finance and support to entrepreneurs 7. Finance planning 8. Capital structure and primary policies	3	10	1, 2	2	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
III.	Enterprise management 1. Working capital and inventory management 2. Production and operation management 3. Marketing management 4. Personnel management 5. Quality management	6	20	1, 2	3	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
IV.	Enterprise development 1. Growth strategies; 2. Accounting; Sickness in enterprise 3. Ecommerce 4. Franchising	3	10	1, 2	3	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics
V.	Presentation of a detailed business proposal of any business related to garment industry	6	20	2, 3, 4	4	8	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment and Sustainability, Human Values and Professional Ethics

SUGGESTED EVALUATION

CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination Class test	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class assignment	15	Written	With defined time	Student's performance to make decision					
Home assignment	10	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					
Attendance	05	-	-	-					
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Reference Books	
1.	Chandran, R. (2009). <i>International Business - 2nd Edition</i> . Mumbai: Jaico Publishing House.
2.	Drucker, P. F. (2015). <i>Innovation and Entrepreneurship: Practices and Principles</i> . New York: Routledge Classics.
3.	Granger, M., & Sterling, T. (2011). <i>Fashion Entrepreneurship: Retail Business Planning</i> . London: Bloomsbury Publishing.
4.	Gupta, C. B., & Khanka, S.S. (2011). <i>Entrepreneurship and Small Business Management</i> . New Delhi: Sultan Chand & Sons.
5.	Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2008). <i>Entrepreneurship</i> – Sixth ed. New Delhi: Tata McGraw Hill Education Pvt. Ltd.
6.	Kotler, P. (2004). <i>Principles of Marketing - 10th Edition</i> . New Delhi: Prentice Hall.
7.	Krueger, N. F. (2002). <i>Entrepreneurship: Critical Perspectives on Business and Management</i> . New York: Routledge Classics.
8.	Kumar, A. (2012). <i>Entrepreneurship: Creating and Leading an Entrepreneurial Organization</i> . New Delhi: Pearson India Ltd.
9.	Mohanty, S. K. (2017). <i>Fundamentals of Entrepreneurship</i> . New Delhi: PHI Learning Pvt. Ltd.
10.	Sharma, S., Singh, B., & Singhal, S. (2005). <i>Entrepreneurship Development</i> . New Delhi: Wisdom Publication.
11.	Stokes, D., Wilson, D., & Mador, M. (2010). <i>Entrepreneurship</i> . Hampshire: Cengage Learning.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5											
Year	III	Role of Information Technology in Apparel Industry (Ability Enhancement Course)			Credits / Hours per week			2 (2+0) 2 hrs/week Theory = 30 hrs Total = 30 hrs/week			
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:			Maximum Marks / Minimum Marks			50 Marks / 18 Marks			
Mode of Transaction		Lecture									
Course Outcome (CO)											
CO1 Understand the basic concepts of Information Technology											
CO2 Appreciate artificial intelligence and its importance in apparel industry											
CO3 Explore the role of Industry 4.0 in apparel industry											
CO4 Study the ERP systems and its usefulness in apparel manufacturing											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
THEORY											
I	Basics of Information Technology 1. Introduction 2. Information Systems (IS) 3. Classification of Information Systems 4. Security issues in Information Systems 5. Need of IT support in apparel industry			6	20	1, 2	1	5	Skill Development	Local, National, Regional, Global	Professional Ethics
II	Artificial intelligence and its application in the apparel industry 1. Introduction 2. Types of artificial intelligence 3. Applications of artificial intelligence in apparel industry 4. Challenges and future directions of artificial intelligence			6	20	1, 2	2	5	Skill Development	Local, National, Regional, Global	Professional Ethics
III	Industry 4.0 in Clothing and Apparel Industry 1. Definitions, need and importance of Industry 4.0 2. Characteristics of Industry 4.0 3. Design principles and building blocks of Industry 4.0 4. Industry 4.0 for apparel production and management			9	30	1, 2, 3	3	5	Skill Development	Local, National, Regional, Global	Professional Ethics

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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IV	ERP in Apparel Industry 1. Introduction, needs and benefits of ERP 2. Lifecycle of ERP 3. Technical modules in ERP 4. Role of ERP in apparel industry 5. Vendors and consultants for apparel ERP 6. Process flow in ERP for apparel industry 7. Benefits of ERP in apparel industry 8. Cloud ERP and its benefits	9	30	1, 2, 3	4	5	Skill Development	Local, National, Regional, Global	Professional Ethics
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class Test	10	Written	Traditional essay type	Fixed date force students to learn	Semester exam	25	Written	Traditional essay type	For depth and planned preparation
Mid semester class test	10	Written	Traditional essay type	For depth and planned preparation					
Attendance	05	-	-	-					
Total	25				Total	25			

Reference Books	
1.	Keiser, S. J., & Garner, M. B. (2023). <i>Beyond design: The synergy of apparel product development</i> (5th ed.). Bloomsbury Publishing.
2.	Brannon, E. L., & Divita, L. (2020). <i>Fashion forecasting</i> (5th ed.). Bloomsbury Publishing.
3.	Burns, L. D., Mullet, K. K., & Bryant, N. O. (2016). <i>The business of fashion: Designing, manufacturing, and marketing</i> (5th ed.). Bloomsbury Publishing.
4.	Rosenau, J. A., & Wilson, D. L. (2014). <i>Apparel merchandising: The line starts here</i> (2nd ed.). Fairchild Books.
5.	Cooklin, G., Hayes, S. G., & Fairclough, J. (2015). <i>Cooklin's garment technology for fashion designers</i> . Wiley-Blackwell.
6.	Hethorn, J., & Ulasewicz, C. (2020). <i>Sustainable fashion: Why now? A conversation about issues, practices, and possibilities</i> (2nd ed.). Bloomsbury Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Third Year – Level 5.5											
Year	III	Internship in Apparel Industry (Internship)			Credits / Hours per semester			4 (0+4) Credits / 4 Hours per day (30 days) Total: 120 hours/semester			
Semester	II	Year of Introduction: 2024-25 Year of Syllabus Revision:			Maximum Marks / Minimum marks			100 Marks/ 36 Marks			
Mode of Transaction		Practical									
Course Outcome (CO) CO1 Enhance student’s personal and professional development through hands on skill in any fashion and apparel related firm. CO2 Gain insights into the operational dynamics of apparel industry. CO3 Cultivate and strengthen entrepreneurial mindset and skills.											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp) / Entrepreneurship (Ent) / Skill Development (SD)	Relevance to Local (L) / National (N) / Regional (R) / Global (G)	Relation to Gender (G), Environment Sustainability (ES), Human Values (EV), Professional Ethics (PE)
PRACTICAL											
I	Internship of 1 month in any of the following: - Apparel manufacturing units - Fashion startups - Textile / Apparel Testing Laboratories - Student internship programme offered by universities			120	100	1, 2, 3, 4, 5, 6	1, 2, 3	10	Employability, Entrepreneurship, Skill Development	Local, National, Regional, Global	Gender, Environment Sustainability, Human Values, Professional Ethics
SUGGESTED EVALUATION											
CCE (50% IA)					SEE (50% UA)						
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective		
Field assignment	40	Integrated	Field visit with report	Develop observation and recording skills	Viva/Oral exam	30	Oral	Individual	Practical experience towards job interview situation		
Attendance	10				Report writing	20	Written	On activities performed or even observed	Develop a key transferable skill		
Total	50				Total	50					

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Fourth Year

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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PROGRAMME SPECIFIC OUTCOMES

Fourth YEAR (LEVEL 6.0)

- PSO 21 Develop strategies to manage an apparel industry through technical expertise in lean manufacturing, industrial engineering and operations research, quality control and recent advances and automation in apparel industry.
- PSO 22 Inculcate acute awareness of the current trends and commercial aspects of marketing, supply chain, logistics, merchandising and retailing.
- PSO 23 Equip with the knowledge and skills necessary for identifying and succeeding in start-ups and entrepreneurial ventures.
- PSO 24 Impart technical skills in various aspects of shop floor management.
- PSO 25 Prepare globally competitive industry ready graduates by imparting training and experiential learning through internships and seminars.
- PSO 26 Prepare graduates for higher studies and research in the field of apparel industry.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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FOURTH YEAR COURSES OFFERED BY FASHION AND APPAREL TECHNOLOGY PROGRAMME With Research

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	7	Industrial Engineering	4(2+2)	Major 17
		Global Fashion Systems, Branding & Markets	4(4+0)	Major 18
		Entrepreneurial Skills	4(3+1)	Major 19
		1 minor courses from a basket of 6 courses		
		E-Commerce In Fashion: Trends & Forecasting	4(4+0)	Minor 8
		Dissertation – I	6(0+6)	Research
		TOTAL	22 (15+7)	
	8	Lean Management	4(4+0)	Major 20
		Apparel Retailing & Merchandising	4(3+1)	Major 21
		Logistics & Supply Chain Management	4(4+0)	Major 22
		1 minor courses from a basket of 6 courses		
		Fashion Business Operations: Buying and Merchandising	4(4+0)	Minor 9
		Dissertation – II	6(0+6)	Research
		TOTAL	22(12+10)	
Award of UG Honours Degree in Major course with 176 credits				

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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FOURTH YEAR COURSES OFFERED BY FASHION AND APPAREL TECHNOLOGY PROGRAMME Without Research

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	7	Industrial Engineering	4(2+2)	Major 17
		Global Fashion Systems, Branding & Markets	4(4+0)	Major 18
		Entrepreneurial Skills	4(3+1)	Major 19
		1 minor courses from a basket of 6 courses		
		E-Commerce In Fashion: Trends & Forecasting	4(4+0)	Minor 8
		On Job Training – I	6(0+6)	OJT
		TOTAL	22 (13+9)	
	8	Lean Management	4(4+0)	Major 20
		Apparel Retailing & Merchandising	4(3+1)	Major 21
		Logistics & Supply Chain Management	4(4+0)	Major 22
		1 minor courses from a basket of 6 courses		
		Fashion Business Operations: Buying and Merchandising	4(4+0)	Minor 9
		On Job Training – II	6(0+6)	OJT
		TOTAL	22(12+10)	
Award of UG Honours Degree in Major course with 176 credits				

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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YEAR 4

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| PSO 21 | Develop strategies to manage an apparel industry through technical expertise in lean manufacturing, industrial engineering and operations research, quality control and recent advances and automation in apparel industry. |
| PSO 22 | Inculcate acute awareness of the current trends and commercial aspects of marketing, supply chain, logistics, merchandising and retailing. |
| PSO 23 | Equip with the knowledge and skills necessary for identifying and succeeding in start-ups and entrepreneurial ventures. |
| PSO 24 | Impart technical skills in various aspects of shop floor management. |
| PSO 25 | Prepare globally competitive industry ready graduates by imparting training and experiential learning through internships. |
| PSO 26 | Prepare graduates for higher studies and research in the field of apparel industry. |

 सत्यं शिबं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SEMESTER I

(With Research)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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FOURTH YEAR
COURSES OFFERED BY
FASHION AND APPAREL TECHNOLOGY PROGRAMME
With Research

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	7	Industrial Engineering	4(2+2)	Major 17
		Global Fashion Systems, Branding & Markets	4(4+0)	Major 18
		Entrepreneurial Skills	4(3+1)	Major 19
		1 minor courses from a basket of 6 courses		
		E-Commerce In Fashion: Trends & Forecasting	4(4+0)	Minor 8
		Dissertation – I	6(0+6)	Research
		TOTAL	22 (15+7)	

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0									
Year	IV	Industrial Engineering (Major 17)	Credits / Hours per week				4 (2+2) 6 hrs/week Theory = 30 hrs, Practical= 60hrs Total = 90 hrs/week		
Semester	I		Maximum Marks / Grade				100 Marks / 36 Marks		
Mode of Transaction		Lecture							
Course Outcome (CO) CO1 Explain fundamental concepts and scope of industrial engineering in apparel manufacturing CO2 Apply work study and method study techniques to improve productivity CO3 Analyze time study, standard time, and labour performance in garment production CO4 Evaluate production planning, line balancing, and capacity planning methods CO5 Assess ergonomics, work environment, and future trends in industrial engineering									
Unit No.	Topic	Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Introduction to Industrial Engineering 1. Concept, scope, and objectives of industrial engineering 2. Role of industrial engineer in apparel industry	10	12	2	CO1	21,25	Emp, SD	N,G	ES

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	3. Productivity, efficiency, and effectiveness 4. Production systems in apparel manufacturing 5. Industrial engineering functions in garment factories								
II.	Work Study and Method Study 1. Work study concepts and objectives 2. Method study procedures and symbols 3. Process charts and flow diagrams 4. Motion economy principles 5. Workstation and workplace design	10	10	3	CO2	21,24	Emp, SD	N,G	ES, PE
III.	Time Study and Work Measurement 1. Time study techniques and procedures 2. Performance rating and allowances 3. Calculation of standard time 4. Work sampling 5. Application of standard time in apparel operations	10	10	4	CO3	21,24	Emp, SD	N,G	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Practical									
IV.	Production Planning, Control and Line Balancing 1. Production planning and control (PPC) 2. Line balancing techniques in apparel production 3. Capacity planning and bottleneck analysis 4. Layout planning and material flow 5. Productivity measurement tools	30	34	4	CO4	21,25	Emp, SD	G	ES, PE
V.	Ergonomics, Human Factors and Future Trends 1. Ergonomics and human factors in apparel industry 2. Workplace safety and occupational health 3. Gender-sensitive workstation design 4. Environmental considerations in IE 5. Digitalization, Industry 4.0 and future trends in industrial engineering	30	34	5	CO5	21,25,26	Emp, SD	G	G,ES,HV,PE

SUGGESTED EVALUATION

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	25	Written	Traditionally essay type	Fixed date forces students to learn					
Total	50				Total	50			

Reference Books	
1.	Niebel, B. W., & Freivalds, A. (2020). <i>Engineering methods and standards</i> (13th ed.). McGraw-Hill Education.
2.	Wignarajah, K., & Jin, X. (2019). <i>Industrial engineering applications in apparel manufacturing</i> . Springer.
3.	Barnes, R. M. (2018). <i>Motion and time study: Design and measurement of work</i> (8th ed.). Wiley.
4.	International Labour Organization. (2018). <i>Ergonomic checkpoints</i> . ILO.
5.	Zandin, K. B. (2016). <i>Maynard's industrial engineering handbook</i> (6th ed.). McGraw-Hill Education.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Global Fashion Systems, Branding & Markets (Major 18)	Credits / Hours per week					(4+0) 4hrs/week Theory= 60 hrs Total = 4 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1 Explain the structure and functioning of global fashion systems and supply networks CO2 Evaluate fashion branding strategies and brand identity across different market segments CO3 Analyze global fashion marketing strategies and consumer behaviour patterns CO4 Interpret international quality, sustainability, and compliance requirements in fashion CO5 Assess emerging global fashion trends and future opportunities in fashion markets										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/ Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Theory										

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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I.	Global Fashion Systems and Value Chains 1. Structure of the Global Fashion Industry 2. Fashion Capitals and Emerging Markets 3. Global Fashion Value Chain and Supply Networks 4. Fast Fashion, Slow Fashion, and Sustainable Fashion 5. Role of Technology and Digitalization 6. Global Fashion Brand Case Studies	12	20	1, 2,3	CO1	22,25	Emp,SD	G	ES, PE
II.	Fashion Branding and Strategic Identity 1. Brand versus Product: Strategic Perspective 2. Brand Positioning, Differentiation, and Equity 3. Brand Identity Elements and Storytelling 4. Luxury, Premium, and Mass Market Branding 5. Corporate and Designer Brand Strategies 6. Global Brand Evolution Case Studies	12	20	3,4	CO2	22,23	Emp,SD	G	HV, PE
III.	Global Fashion Marketing and Consumer Behaviour 1. Fashion Marketing Concepts and Strategies 2. Digital, Social Media, and Omni-channel Marketing 3. Influencer Marketing and Brand Communities 4. Consumer Psychology and Cross-cultural Behaviour 5. Market Segmentation and Targeting 6. Analysis of Global Marketing Campaigns	12	20	4	CO3	22,25	Emp,SD	G	G, HV, PE
IV.	International Standards, Ethics and Compliance 1. International Quality Standards (ISO, OEKO-TEX, GOTS – overview) 2. Ethical Sourcing and Responsible Supply Chains 3. Sustainability Certifications and Reporting 4. Export Regulations and Trade Policies 5. Intellectual Property Rights in Fashion	12	20	3,4	CO4	21,25	Emp,SD	G	ES, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	6. Environmental and Social Compliance								
V.	Global Fashion Trends, Innovation and Markets 1. Trend Forecasting Tools and Industry Reports 2. Role of AI, Big Data, and Digital Platforms 3. Circular Fashion and Sustainable Market Models 4. Cross-cultural Design and Global Aesthetics 5. Emerging Careers in Global Fashion Markets	12	20	5	CO5	25,26	Emp,SD	G	ES, G, PE

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Role play	10	Oral	Small group of 2-5 members work in joint task	Develop personality					
Class test	10	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

References

1.	McKinsey & Company. (2024). <i>The state of fashion 2024</i> .
2.	World Trade Organization. (2020). <i>World trade statistical review</i> . WTO.
3.	Organisation for Economic Co-operation and Development. (2018). <i>Due diligence guidance for responsible supply chains in the garment and footwear sector</i> . OECD Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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4.	Hines, T., & Bruce, M. (2018). <i>Fashion marketing: Contemporary issues</i> (2nd ed.). Routledge.
5.	United Nations Environment Programme. (2019). <i>Sustainability and circularity in the textile value chain</i> . UNEP.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Entrepreneurial Skills (Major 19)	Credits / Hours per week					04(3+1) 5hrs/week Theory= 45hrs Practical=30hrs Total = 75 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1: Understand fundamentals of entrepreneurship in the fashion and apparel sector. CO2: Identify and evaluate fashion business opportunities. CO3: Prepare a basic business plan for a fashion enterprise. CO4: Apply marketing, branding, and digital tools for fashion startups. CO5: Demonstrate knowledge of financial, legal, and operational aspects of fashion businesses. CO6: Develop entrepreneurial skills such as leadership, innovation, and risk management.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp) / Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R) / Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
I.	Introduction to Entrepreneurship 1. Meaning and importance of entrepreneurship 2. Entrepreneurial mindset and characteristics 3. Types of entrepreneurs (startup, social, women, fashion entrepreneurs)		8	20	2	CO1	23,26	Ent, SD	L, N	G, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	4. Scope of entrepreneurship in Fashion & Apparel Technology 5. Role of entrepreneurship in economic and employment generation								
II.	Fashion Business Opportunities 1. Identification of business ideas in fashion and textiles 2. Apparel manufacturing units (boutique, export house, job work) 3. Fashion accessories, surface design, and value-added products 4. Sustainable fashion and eco-friendly enterprises 5. Case studies of successful fashion entrepreneurs	10	20	3	CO2	22, 23	Ent, Emp	L, R, N	G,HV,ES,PE
III.	Business Planning and Startup Process 1. Idea generation and feasibility analysis 2. Business model canvas for fashion startups 3. Preparation of a basic business plan 4. Funding sources: self-finance, bank loans, government schemes, startups 5. Government support for MSMEs and fashion startups (overview)	10	25	4	CO3	23, 25	Ent, SD	N, G	G, HV, PE
IV.	Marketing, Branding and Managing Fashion Enterprises 1. Basics of fashion marketing and consumer behavior 2. Branding and brand identity in fashion 3. Pricing, promotion, and distribution strategies 4. Digital marketing and e-commerce platforms 5. Production planning and quality control 6. Costing and financial management basics 7. Legal aspects: registration, GST, IPR, trademarks 8. Human resource management in small fashion	17	20	3	CO4	22, 25	Emp, Ent	R, N, G	G, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	units								
	9. Risk management and problem-solving								
V.	Practical / Skill-Based Activities 1. Preparation of a mini business plan 2. Market survey and trend analysis 3. Branding and logo design for a fashion startup 4. Costing and pricing exercise 5. Presentation of fashion startup idea 6. Interaction with local entrepreneurs' / industry visit	5	15	5	CO3, CO4, CO5	23, 25	Emp, SD	L, N	G,HV,ES,PE

Reference Books

1	Desai, V. (2011). <i>Dynamics of entrepreneurial development and management</i> (5th ed.). Himalaya Publishing House.
2	Panda, T. (2018). <i>Entrepreneurship development</i> . Sultan Chand & Sons.
3	Government of India, Ministry of Micro, Small and Medium Enterprises. (n.d.). <i>MSME development schemes and initiatives</i> . https://msme.gov.in
4	Government of India, Department for Promotion of Industry and Internal Trade. (n.d.). <i>Startup India: Action plan and schemes</i> . https://www.startupindia.gov.in
5	Rani, S., & Kumar, R. (2020). Fashion entrepreneurship in India: Challenges and opportunities. <i>Journal of Fashion Technology & Management</i> , 4(2), 45–52.

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class test									
Class assignment	15	Written	With defined time	Student's performance to make decision					

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Home assignment	05	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					
Attendance	05	-	-	-					
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	E-COMMERCE IN FASHION: TRENDS & FORECASTING (Minor 8)	Credits / Hours per week					(4+0) 4hrs/week Theory= 60 hrs Total = 4 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO)										
CO1 Explain the structure and functioning of global fashion systems and supply networks										
CO2 Evaluate fashion branding strategies and brand identity across different market segments										
CO3 Analyze global fashion marketing strategies and consumer behaviour patterns										
CO4 Interpret international quality, sustainability, and compliance requirements in fashion										
CO5 Assess emerging global fashion trends and future opportunities in fashion markets										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent))/ Skill Development t (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Theory										

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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I.	Fashion E-Commerce Ecosystem 1. Evolution of E-Commerce in Fashion Industry 2. Types of Fashion E-Commerce Platforms (B2C, D2C, Marketplaces) 3. Omni channel Retailing in Fashion 4. Fashion Supply Chain Integration with E-Commerce 5. Role of Technology in Online Fashion Retail 6. Case Studies of Leading Fashion E-Commerce Platforms	12	20	1,2	CO1	22,25	Emp, SD	G	PE, ES
II.	Digital Consumer Behaviour in Fashion 1. Online Fashion Consumer Decision-Making 2. Factors Influencing Online Apparel Purchase 3. Role of Reviews, Ratings, and Social Proof 4. Gender and Cultural Influences in Online Fashion Consumption 5. Personalization and Customer Experience 6. Global vs Local Online Fashion Consumers	12	20	3,4	CO2	22,25	Emp, SD	N,G	PE, HV,G
III.	Fashion Trends & Forecasting in E-Commerce 1. Concept of Fashion Trends and Forecasting 2. Short-term and Long-term Forecasting 3. Trend Forecasting Agencies and Online Reports 4. Use of Big Data and AI in Trend Prediction 5. Social Media, Search Data, and Trend Signals 6. Case Studies of Trend-Driven Online Fashion Brands	12	20	4	CO3	22,26	Emp, SD	G	PE, ES
IV.	Digital Merchandising, Marketing & Analytics 1. Online Visual Merchandising for Fashion 2. Product Presentation, Styling, and Content Creation 3. Digital Fashion Marketing and Influencer Strategies	12	20	4,5	CO4	21,25	Emp, SD	G	PE, HV

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	4. Pricing, Promotions, and Demand Forecasting 5. Introduction to Fashion E-Commerce Analytics 6. Performance Metrics and KPIs								
V.	Future Trends & Sustainable Fashion E-Commerce 1. AI, AR/VR, and Virtual Try-On Technologies 2. Social Commerce and Live Shopping 3. Circular Fashion and Re-commerce Platforms 4. Sustainability Challenges in Fashion E-Commerce 5. Ethical Issues and Data Privacy 6. Emerging Careers in Fashion E-Commerce & Forecasting	12	20	5	CO5	25,26	Emp, SD	G	PE, ES, G

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

References

1.	McKinsey & Company. (2024). <i>The state of fashion 2024</i>
2.	Euromonitor International. (2023). <i>Digital consumer trends in fashion</i> .
3.	World Economic Forum. (2020). <i>Shaping the future of digital commerce</i> .
4.	United Nations Environment Programme. (2019). <i>Sustainability and circularity in the textile value chain</i> . UNEP.
5.	Kim, J., & Lennon, S. J. (2019). <i>E-commerce and consumer behaviour in fashion</i> . Springer.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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| 6. | Jackson, T., Shaw, D., & Drury, S. (2018). <i>Fashion marketing</i> (2nd ed.). Palgrave Macmillan. |
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Dissertation-I	Credits / Hours per week				(0+6) 12 hrs/week Practical = 180 hrs Total = 12 hrs/week			
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks				100 Marks / 36 Marks			
Mode Of Transaction		Field Work								
Course Outcome (CO) CO1 Identify and formulate a research problem relevant to the apparel industry CO2 Conduct systematic review of literature and identify research gaps CO3 Develop appropriate research design and methodology CO4 Design tools for data collection CO5 Collect and organize primary and/or secondary data CO6 Apply basic statistical tools for preliminary analysis CO7 Prepare structured research proposal and interim dissertation report										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent) / Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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I.	Research Problem Identification 1. Area selection (Apparel production / Retail / Sustainability / Technology / Marketing) 2. Problem identification and justification 3. Statement of research problem 4. Research objectives and hypotheses	30	16	1,2	CO1	22,25	SD	G	PE
II.	Review of Literature 1. Sources of literature 2. Review structuring 3. Identification of research gaps 4. Referencing (APA style)	30	17	4	CO2	26	SD	G	PE
III.	Research Design and Methodology 1. Research types (Exploratory / Descriptive / Experimental) 2. Sampling design 3. Research tools selection 4. Validity and reliability	30	16	5	CO3	22,26	SD	G	PE
IV.	Tool Development 1. Questionnaire construction 2. Interview schedule 3. Observation method 4. Pilot study	25	14	5	CO4	25	SD	G	PE
V.	Data Collection 1. Primary data collection 2. Secondary data sources 3. Ethical considerations 4. Documentation	25	13	4	CO5	26	Emp, SD	G	PE, HV

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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VI.	Preliminary Data Analysis 1. Data coding and tabulation 2. Descriptive statistics 3. Use of Excel / SPSS (overview) 4. Interpretation of results	25	14	5	CO6	26	Emp, SD	G	PE
VII.	Interim Report Writing and Presentation 1. Chapter organization 2. Formatting guidelines 3. Plagiarism checking 4. Proposal presentation and viva	20	10	6	CO7	26	Emp, SD	G	PE

Reference Books

1.	Creswell, J. W., & Creswell, J. D. (2018). <i>Research design: Qualitative, quantitative, and mixed methods approaches</i> (5th ed.). Sage Publications.
2.	Saunders, M., Lewis, P., & Thornhill, A. (2019). <i>Research methods for business students</i> (8th ed.). Pearson Education.
3.	Kumar, R. (2019). <i>Research methodology: A step-by-step guide for beginners</i> (5th ed.). Sage Publications.
4.	Choi, T. M. (2020). <i>Sustainable fashion supply chain management</i> . Springer.
5.	APA. (2020). <i>Publication manual of the American Psychological Association</i> (7th ed.). American Psychological Association.

SUGGESTED EVALUATION

CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	15	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Viva/Oral examination	25	Oral	Individually or in small groups.	Practical experience towards job interview situation.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Mid semester examination, Lab work	15	Practical examination	Component of working with one's hand	Keep the students on the task.	Viva/Oral examination	25	Product presentation	Individually or in small groups.	Practical experience towards job interview situation.
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.					
Attendance	10	-	-	-					
Total	50				Total	50			

 सत्यं शिवं सुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SEMESTER II

(With Research)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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FOURTH YEAR
COURSES OFFERED BY
FASHION AND APPAREL TECHNOLOGY PROGRAMME
With Research

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	8	Lean Management	4(4+0)	Major 20
		Apparel Retailing & Merchandising	4(3+1)	Major 21
		Logistics & Supply Chain Management	4(4+0)	Major 22
		1 minor courses from a basket of 6 courses		
		Fashion Business Operations: Buying and Merchandising	4(4+0)	Minor 9
		Dissertation – II	6(0+6)	Research
		TOTAL	22(12+10)	
Award of UG Honours Degree in Major course with 176 credits				

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Lean Management (Major 20)	Credits / Hours per week				4 (4+0) 4 hrs/week Theory = 60 hrs Total = 60 hrs/week			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Grade				100 Marks / 36 Marks			
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Explain the principles, philosophy, and evolution of lean management and its relevance to the clothing and textile industry. CO2 Apply lean tools and techniques to analyze and improve processes in apparel manufacturing systems. CO3 Analyze lean supply chain practices to reduce waste and improve efficiency in textile and apparel operations. CO4 Evaluate lean implementation strategies and case studies for improving productivity, sustainability, and competitiveness. CO5 Assess the role of digitalization, Industry 4.0, and human-centric lean practices in future apparel manufacturing systems										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Introduction to lean management 1. Philosophy and evolution of lean thinking		12	20	2	CO1		Emp, SD	N, G	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	2. Toyota Production System 3. Principles of lean thinking 4. Types of waste 5. Relevance of lean in textile and apparel industry.								
II.	Lean tools and techniques 1. 5S 2. Value Stream Mapping 3. Just-In-Time 4. Kaizen 5. Line balancing 6. setup time reduction.	12	20	3	CO2		Emp, SD	N, G	ES, PE
III.	Lean supply chain management 1. Concepts and waste identification, 2. Lean procurement 3. Vendor coordination, 4. Inventory reduction, and integration with sustainable practices.	12	20	4	CO3		Emp, SD	G	ES
IV.	Lean implementation 1. Framework, 2. Performance measurement, 3. Industry case studies, 4. Lean for sustainability, and future trends in fashion and textile industry.	12	20	5	CO4		Emp, Ent	G	ES, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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V.	Digital Lean, Industry 4.0 and Human-Centric Lean - Integration of Lean with Industry 4.0 - Digital tools for lean manufacturing (IoT, RFID, data analytics – overview) - Smart factories and lean automation in apparel industry - Human-centric lean: ergonomics, skill development, and worker well-being - Future of lean manufacturing in global apparel industry	12	20	5,6	CO5	21,25,26	Emp, Ent	G	ES, HV, PE
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

Reference Books	
1.	Nayak, R. (Ed.). (2022). <i>Lean supply chain management in fashion and textile industry</i> . Springer.
2.	Jana, P., & Tiwari, M. (Eds.). (2021). <i>Lean tools in apparel manufacturing</i> . Elsevier.
3.	International Labour Organization. (2019). <i>Lean manufacturing techniques for textile industries</i> (PDF). International Labour Organization
4.	Bhasin, S. (2015). <i>Lean Management Beyond Manufacturing: A Holistic Approach</i> . London: Springer International Publishing.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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5.	Charron, R., Harrington, J., Voehl, F., & Wiggin, H. (2015). <i>The Lean Management Systems Handbook</i> . London: CRC Press.
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Apparel Retailing and Merchandising (Major 21)		Credits / Hours per week			4 (3+1) 5 hrs/week Theory = 45 hrs Practical = 30hrs Total =75 hrs/week			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:		Maximum Marks / Grade			100 Marks / 36 Marks			
Mode of Transaction		Lecture and Practical								
Course Outcome (CO) CO1: Explain the structure and functioning of the apparel retail industry and its evolution. CO2: Analyze consumer behaviour and market trends influencing apparel retailing. CO3: Apply principles of merchandise planning, buying, and sourcing in apparel retail. CO4: Evaluate pricing, promotion, and supply chain strategies in apparel merchandising. CO5: Design effective visual merchandising and store presentation strategies. CO6: Use basic retail analytics and technology tools for decision-making in apparel retail.										
Unit No.	Topic		Contact Hours	Weight age (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Introduction to Apparel Retailing 1. Concept and scope of apparel retailing 2. Evolution of apparel retail: Global and Indian perspective		11	20	L2	CO 1	22, 25	EMP	L, N, G	G, HV, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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	3. Types of retail formats: Department stores, specialty stores, fast fashion, online and Omni channel retail 4. Roles and responsibilities of apparel retailers								
II.	Consumer Behaviour and Fashion Markets 1. Apparel consumer behaviour: Psychological, social, and cultural influences 2. Fashion adoption process and diffusion of fashion 3. Market segmentation, targeting, and positioning (STP) 4. Trend forecasting and market research methods	11	20	L4	CO 2	22, 25	Emp, SD	L, N, G	G, ES, HV,PE
III.	Apparel Merchandising and Buying 1. Principles of apparel merchandising 2. Merchandise planning and assortment planning 3. Buying organization and buying process 4. Vendor selection, sourcing strategies, and ethical sourcing	11	25	L3	CO 3	21, 22, 23	Emp, Ent, SD	N, G	G, ES, HV,PE
IV.	Retail Operations, Pricing & Retail Technology 1. Pricing strategies in apparel retail 2. Markups, markdowns & profit planning 3. Apparel supply chain management & logistics	12	25	L5 L6	CO 4 CO 5 CO 6	21, 22 23, 25	Emp, SD	N, G	G, ES, HV,PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	4. Inventory management and retail operations 5. Branding & retail communication 6. Sales promotion and CRM 7. Role of technology in apparel retailing 8. E-retailing, omnichannel strategies 9. Retail analytics & KPIs 10. Sustainability and future trends in apparel retail								
V.	Practical / Experiential Learning 1. Case study analysis of leading apparel retailers 2. Consumer survey & market analysis report 3. Merchandise assortment planning & planogram development 4. Visual merchandising display project 5. Retail store visit / virtual retail audit 6. Basic retail analytics exercise (KPI calculation)	15	10	L6	CO3, CO5, CO6	23, 24, 25, 26	Emp, Ent, SD	L, N, G	G, ES, HV, PE

Reference Books

1	Berman, B., & Evans, J. R. (2018). <i>Retail management: A strategic approach</i> (13th ed.). Pearson Education.
2	Diamond, J., Diamond, E., & Litt, S. (2015). <i>Fashion retailing: A multi-channel approach</i> . Fairchild Books.
3	Easey, M. (2009). <i>Fashion marketing</i> (3rd ed.). Wiley-Blackwell.
4	Goworek, H., McGoldrick, P., McGuinness, M., & Perry, P. (2016). <i>Retail marketing management: Principles and practice</i> . Pearson Education.
5	Levy, M., Weitz, B. A., & Grewal, D. (2020). <i>Retailing management</i> (10th ed.). McGraw-Hill Education.
6	Posner, H. (2015). <i>Marketing fashion</i> (2nd ed.). Laurence King Publishing.

SUGGESTED EVALUATION

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	20	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	10	Written	Traditionally essay type	Fixed date forces students to learn					
Lab work	20	Practical	Component of working with one's hand	Keep the students on the task					
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Logistics & Supply Chain Management (Major 22)		Credits / Hours per week				4 4+0) 4 hrs/week Theory = 60 hrs Total = 60 hrs/week		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:		Maximum Marks / Grade				100 Marks / 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Explain fundamental concepts and components of logistics and supply chain management CO2 Apply logistics and supply chain planning techniques in textile and apparel operations CO3 Analyze procurement, inventory, and distribution strategies for supply chain efficiency CO4 Evaluate global logistics systems, risk management, and sustainability practices CO5 Assess emerging trends and digital technologies shaping future supply chains										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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I.	UNIT I: Introduction to Logistics and Supply Chain Management 1. Concepts and scope of logistics and supply chain management 2. Components of supply chain: suppliers, manufacturers, distributors, retailers 3. Logistics vs supply chain management 4. Role of SCM in textile and apparel industry 5. Objectives and performance measures of SCM	12	20	2	CO1	21,25	Emp, SD	N, G	PE
II.	Procurement and Inventory Management 1. Procurement processes and sourcing strategies 2. Supplier selection and evaluation 3. Inventory types and inventory control techniques 4. Just-in-Time (JIT) and lean inventory concepts 5. Warehousing and storage systems	12	20	3	CO2	21,24	Emp, SD	N, G	ES, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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III.	Logistics Operations and Distribution Management 1. Transportation modes and selection 2. Distribution network design 3. Packaging, handling, and material movement 4. Apparel distribution and retail logistics 5. Reverse logistics and returns management	12	20	4	CO3	22,25	Emp, SD	G	ES, HV
IV.	Global Supply Chain, Risk and Sustainability 1. Global sourcing and international logistics 2. Trade regulations and documentation 3. Supply chain risks and resilience 4. Sustainable supply chain practices 5. Ethical and social compliance in logistics	12	20	4,5	CO4	21,25	Emp, SD	G	ES, HV,PE
V.	Digital Supply Chain and Future Trends 1. Role of information systems in SCM 2. Digital technologies: ERP, RFID, IoT (overview) 3. Data analytics in supply chain decision-making	12	20	5	CO5	25,26	Emp, SD	G	ES, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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4. E-commerce logistics and omni-channel supply chains									
5. Future trends and career opportunities in SCM									

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

Reference Books	
1.	Chopra, S., & Meindl, P. (2022). <i>Supply chain management: Strategy, planning, and operation</i> (8th ed.). Pearson.
2.	United Nations Conference on Trade and Development. (2021). <i>Review of maritime transport</i> . UNCTAD.
3.	World Trade Organization. (2020). <i>World trade statistical review</i> . WTO.
4.	Organisation for Economic Co-operation and Development. (2018). <i>Due diligence guidance for responsible supply chains in the garment and footwear sector</i> . OECD Publishing.
5.	Hugos, M. (2018). <i>Essentials of supply chain management</i> (4th ed.). Wiley.
6.	Christopher, M. (2016). <i>Logistics and supply chain management</i> (5th ed.). Pearson Education.

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Year	IV	Fashion Business Operations: Buying and Merchandising (Minor 9)	Credits / Hours per week					4 4+0) 4 hrs/week Theory = 60hrs Total = 60 hrs		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Grade					100 Marks / 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1: Explain the structure and scope of fashion business operations at national and international levels. CO2: Describe the roles and responsibilities of buyers and merchandisers in fashion organizations. CO3: Analyze fashion trends, consumer behavior, and market data for buying decisions. CO4: Apply merchandising principles such as assortment planning, pricing, and inventory control. CO5: Evaluate sourcing strategies, vendor management, and negotiation processes. CO6: Assess the impact of retail analytics, technology, and sustainability on fashion buying and merchandising.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
I.	Fashion Business Operations – An Overview 1. Structure of the fashion industry 2. Fashion value chain and business functions 3. Fashion retail formats and business models 4. Domestic and global fashion markets		12	20	L2	CO1	PSO 21, 22	Emp	N, G	G, ES, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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II.	Fashion Buying Principles and Processes 1. Role and responsibilities of a fashion buyer 2. Buying cycle and seasonal calendars 3. Trend forecasting and fashion information sources 4. Market research and consumer demand analysis	12	20	L3	CO2 , CO3	PSO 21, 22	Emp, SD	N, G	G, HV, PE
III.	Fashion Merchandising Concepts 1. Role of fashion merchandiser 2. Merchandise planning and control 3. Assortment planning and line planning 4. Product life cycle and fashion diffusion	12	20	L4	CO3 , CO4	PSO 22, 24	Emp, SD	L, N, G	G, HV, PE
IV.	Pricing, Costing and Inventory Management 1. Cost components in fashion products 2. Pricing strategies and mark-up calculations 3. Markdown planning and profitability analysis 4. Inventory control techniques and stock performance measures	12	20	L4	CO4	PSO 21, 24	Emp, SD	N, G	ES, HV, PE
V.	Sourcing, Vendor Management and Negotiation 1. Domestic and global sourcing strategies 2. Vendor evaluation and selection 3. Ethical sourcing and compliance issues 4. Negotiation techniques and buyer-vendor relationships	12	20	L5	CO5	PSO 21, 22, 23	Emp, Ent, SD	N, R, G	G, ES, HV, PE

Reference Books

1	Goworek, H. (2010). <i>Fashion buying and merchandising</i> . Wiley-Blackwell.
2	Easey, M. (2009). <i>Fashion marketing</i> (3rd ed.). Wiley-Blackwell.
3	Fashionary. (2019). <i>The fashion business manual: An illustrated guide to branding, buying, and marketing</i> . Fashionary International Ltd.
4	McKinsey & Company. (n.d.). <i>Fashion and retail reports</i> . McKinsey & Company.

SUGGESTED EVALUATION

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class Test	10	Written	Traditional essay type	Fixed date force students to learn	Semester exam	50	Written	Traditional essay type	For depth and planned preparation
Mid semester class test	25	Written	Traditional essay type	For depth and planned preparation					
Case study	10	Written	Analyze a given case (real or fictional)	To assess thinking, value and attitude					
Attendance	05	-	-	-					
Total	50				Total	50			

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Dissertation-II	Credits / Hours per week					(0+6) 12 hrs/week Practical = 180 hrs Total = 12 hrs/week		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Field Work								
Course Outcome (CO) CO1 Conduct full-scale data collection and verification CO2 Apply appropriate statistical tools for detailed analysis CO3 Interpret results in relation to research objectives CO4 Draw valid conclusions and suggest recommendations CO5 Prepare a comprehensive dissertation report CO6 Defend research findings through viva voce										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Er t)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional (R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
I.	Completion of Data Collection 1. Finalization of sampling frame		30	16	4	CO1	26	Emp,SD	L,N,G	HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	2. Field data collection / industry data sourcing 3. Monitoring data accuracy 4. Handling missing data 5. Ethical considerations during data collection 6. Documentation and record keeping								
II.	Advanced Statistical Analysis 1. Data coding and tabulation 2. Use of statistical tools (Correlation, Regression, etc.) 3. Hypothesis testing 4. Graphical representation of data 5. Use of statistical software (Excel / SPSS – overview) 6. Interpretation of statistical output	35	20	5	CO2	26	Emp, SD	G	PE
III.	Result Interpretation and Discussion 1. Linking analysis with objectives 2. Comparative analysis with literature 3. Graph and table interpretation 4. Identification of trends and patterns 5. Industry implications 6. Limitations of study	25	14	5	CO3	26	Emp, SD	G	HV
IV.	Findings and Recommendations 1. Major research findings 2. Practical implications for apparel industry 3. Recommendations for industry application 4. Policy suggestions 5. Scope for further research 6. Sustainability considerations	20	11	5	CO4	26	Emp, SD	N,G	ES, HV

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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V.	Dissertation Report Compilation - Chapter I – Introduction - Chapter II – Review of Literature - Chapter III – Research Methodology - Chapter IV – Analysis and Interpretation - Chapter V – Findings and Recommendations - Formatting and layout guidelines	25	14	6	CO5	26	SD	G	PE
VI.	Referencing, Editing and Plagiarism Check - APA style referencing - Citation management - Editing and proofreading - Language and technical accuracy - Plagiarism checking tools - Ethical publication practices	20	11	6	CO5	26	SD	G	PE
VII.	Final Presentation and Viva Voce - Preparation of presentation slides - Visual representation of findings - Communication of research outcomes - Defence of methodology and analysis - Response to expert queries - Incorporation of suggested revisions	25	14	6	CO6	25,26	Emp, SD	G	HV, PE

Reference Books

1.	Creswell, J. W., & Creswell, J. D. (2018). <i>Research design: Qualitative, quantitative, and mixed methods approaches</i> (5th ed.). Sage Publications.
2.	Saunders, M., Lewis, P., & Thornhill, A. (2019). <i>Research methods for business students</i> (8th ed.). Pearson Education.
3.	Kumar, R. (2019). <i>Research methodology: A step-by-step guide for beginners</i> (5th ed.). Sage Publications.
4.	Choi, T. M. (2020). <i>Sustainable fashion supply chain management</i> . Springer.
5.	APA. (2020). <i>Publication manual of the American Psychological Association</i> (7th ed.). American Psychological Association.

SUGGESTED EVALUATION

CCE (50% IA)	SEE (50% UA)
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 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class work	15	Submission	Continuous assessment	Continuous and Comprehensive Evaluation (CCE)	Viva/Oral examination	25	Oral	Individually or in small groups.	Practical experience towards job interview situation.
Mid semester examination, Lab work	15	Practical examination	Component of working with one's hand	Keep the students on the task.	Viva/Oral examination	25	Product presentation	Individually or in small groups.	Practical experience towards job interview situation.
Viva/Oral examination	10	Viva	Individually or in small groups.	Practical experience towards job interview situation.					
Attendance	10	-	-	-					
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SEMESTER I

(Without Research)

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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**FOURTH YEAR
COURSES OFFERED BY
FASHION AND APPAREL TECHNOLOGY PROGRAMME
Without Research**

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	7	Industrial Engineering	4(2+2)	Major 17
		Global Fashion Systems, Branding & Markets	4(4+0)	Major 18
		Entrepreneurial Skills	4(3+1)	Major 19
		1 minor courses from a basket of 6 courses		
		E-Commerce In Fashion: Trends & Forecasting	4(4+0)	Minor 8
		On Job Training – I	6(0+6)	OJT
		TOTAL	22 (13+9)	

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Industrial Engineering (Major 17)	Credits / Hours per week				4 (2+2) 6 hrs/week Theory = 30 hrs, Practical= 60hrs Total = 90 hrs/week			
Semester	I		Maximum Marks / Grade				100 Marks / 36 Marks			
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Explain fundamental concepts and scope of industrial engineering in apparel manufacturing CO2 Apply work study and method study techniques to improve productivity CO3 Analyze time study, standard time, and labour performance in garment production CO4 Evaluate production planning, line balancing, and capacity planning methods CO5 Assess ergonomics, work environment, and future trends in industrial engineering										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
VI.	Introduction to Industrial Engineering 6. Concept, scope, and objectives of industrial engineering 7. Role of industrial engineer in apparel industry 8. Productivity, efficiency, and effectiveness		10	12	2	CO1	21,25	Emp, SD	N,G	ES

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	9. Production systems in apparel manufacturing 10. Industrial engineering functions in garment factories								
VII.	Work Study and Method Study 6. Work study concepts and objectives 7. Method study procedures and symbols 8. Process charts and flow diagrams 9. Motion economy principles 10. Workstation and workplace design	10	10	3	CO2	21,24	Emp, SD	N,G	ES, PE
VIII.	Time Study and Work Measurement 6. Time study techniques and procedures 7. Performance rating and allowances 8. Calculation of standard time 9. Work sampling 10. Application of standard time in apparel operations	10	10	4	CO3	21,24	Emp, SD	N,G	PE
Practical									
IX.	Production Planning, Control and Line Balancing 6. Production planning and control (PPC) 7. Line balancing techniques in apparel production 8. Capacity planning and bottleneck analysis 9. Layout planning and material flow 10. Productivity measurement tools	30	34	4	CO4	21,25	Emp, SD	G	ES, PE
X.	Ergonomics, Human Factors and Future Trends 6. Ergonomics and human factors in apparel industry 7. Workplace safety and occupational health 8. Gender-sensitive workstation design	30	34	5	CO5	21,25,26	Emp, SD	G	G,ES,HV,PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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9. Environmental considerations in IE									
10. Digitalization, Industry 4.0 and future trends in industrial engineering									

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	25	Written	Traditionally essay type	Fixed date forces students to learn					
Total	50				Total	50			

Reference Books	
6.	Niebel, B. W., & Freivalds, A. (2020). <i>Engineering methods and standards</i> (13th ed.). McGraw-Hill Education.
7.	Wignarajah, K., & Jin, X. (2019). <i>Industrial engineering applications in apparel manufacturing</i> . Springer.
8.	Barnes, R. M. (2018). <i>Motion and time study: Design and measurement of work</i> (8th ed.). Wiley.
9.	International Labour Organization. (2018). <i>Ergonomic checkpoints</i> . ILO.
10.	Zandin, K. B. (2016). <i>Maynard's industrial engineering handbook</i> (6th ed.). McGraw-Hill Education.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Global Fashion Systems, Branding & Markets (Major 18)	Credits / Hours per week					(4+0) 4hrs/week Theory= 60 hrs Total = 4 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1 Explain the structure and functioning of global fashion systems and supply networks CO2 Evaluate fashion branding strategies and brand identity across different market segments CO3 Analyze global fashion marketing strategies and consumer behaviour patterns CO4 Interpret international quality, sustainability, and compliance requirements in fashion CO5 Assess emerging global fashion trends and future opportunities in fashion markets										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/ Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Theory										
VI.	Global Fashion Systems and Value Chains 7. Structure of the Global Fashion Industry 8. Fashion Capitals and Emerging Markets 9. Global Fashion Value Chain and Supply Networks 10. Fast Fashion, Slow Fashion, and Sustainable Fashion		12	20	1, 2, 3	CO1	22,25	Emp,SD	G	ES, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	11. Role of Technology and Digitalization 12. Global Fashion Brand Case Studies								
VII.	Fashion Branding and Strategic Identity 7. Brand versus Product: Strategic Perspective 8. Brand Positioning, Differentiation, and Equity 9. Brand Identity Elements and Storytelling 10. Luxury, Premium, and Mass Market Branding 11. Corporate and Designer Brand Strategies 12. Global Brand Evolution Case Studies	12	20	3,4	CO2	22,23	Emp,SD	G	HV, PE
III.	Global Fashion Marketing and Consumer Behaviour 7. Fashion Marketing Concepts and Strategies 8. Digital, Social Media, and Omni-channel Marketing 9. Influencer Marketing and Brand Communities 10. Consumer Psychology and Cross-cultural Behaviour 11. Market Segmentation and Targeting 12. Analysis of Global Marketing Campaigns	12	20	4	CO3	22,25	Emp,SD	G	G, HV, PE
IX.	International Standards, Ethics and Compliance 7. International Quality Standards (ISO, OEKO-TEX, GOTS – overview) 8. Ethical Sourcing and Responsible Supply Chains 9. Sustainability Certifications and Reporting 10. Export Regulations and Trade Policies 11. Intellectual Property Rights in Fashion 12. Environmental and Social Compliance	12	20	3,4	CO4	21,25	Emp,SD	G	ES, HV, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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X.	Global Fashion Trends, Innovation and Markets 6. Trend Forecasting Tools and Industry Reports 7. Role of AI, Big Data, and Digital Platforms 8. Circular Fashion and Sustainable Market Models 9. Cross-cultural Design and Global Aesthetics 10. Emerging Careers in Global Fashion Markets	12	20	5	CO5	25,26	Emp,SD	G	ES, G, PE
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Role play	10	Oral	Small group of 2-5 members work in joint task	Develop personality					
Class test	10	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

References

6.	McKinsey & Company. (2024). <i>The state of fashion 2024</i> .
7.	World Trade Organization. (2020). <i>World trade statistical review</i> . WTO.
8.	Organisation for Economic Co-operation and Development. (2018). <i>Due diligence guidance for responsible supply chains in the garment and footwear sector</i> . OECD Publishing.
9.	Hines, T., & Bruce, M. (2018). <i>Fashion marketing: Contemporary issues</i> (2nd ed.). Routledge.
10.	United Nations Environment Programme. (2019). <i>Sustainability and circularity in the textile value chain</i> . UNEP.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	Entrepreneurial Skills (Major 19)	Credits / Hours per week				04(3+1) 5hrs/week Theory= 45hrs Practical=30hrs Total = 75 hrs/week			
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks				100 Marks / 36 Marks			
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1: Understand fundamentals of entrepreneurship in the fashion and apparel sector. CO2: Identify and evaluate fashion business opportunities. CO3: Prepare a basic business plan for a fashion enterprise. CO4: Apply marketing, branding, and digital tools for fashion startups. CO5: Demonstrate knowledge of financial, legal, and operational aspects of fashion businesses. CO6: Develop entrepreneurial skills such as leadership, innovation, and risk management.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp) / Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R) / Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
VI.	Introduction to Entrepreneurship 6. Meaning and importance of entrepreneurship 7. Entrepreneurial mindset and characteristics 8. Types of entrepreneurs (startup, social, women, fashion entrepreneurs) 9. Scope of entrepreneurship in Fashion & Apparel Technology		8	20	2	CO1	23,26	Ent, SD	L, N	G, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	10. Role of entrepreneurship in economic and employment generation								
VII.	Fashion Business Opportunities 6. Identification of business ideas in fashion and textiles 7. Apparel manufacturing units (boutique, export house, job work) 8. Fashion accessories, surface design, and value-added products 9. Sustainable fashion and eco-friendly enterprises 10. Case studies of successful fashion entrepreneurs	10	20	3	CO2	22, 23	Ent, Emp	L, R, N	G,HV,ES,PE
VIII.	Business Planning and Startup Process 6. Idea generation and feasibility analysis 7. Business model canvas for fashion startups 8. Preparation of a basic business plan 9. Funding sources: self-finance, bank loans, government schemes, startups 10. Government support for MSMEs and fashion startups (overview)	10	25	4	CO3	23, 25	Ent, SD	N, G	G, HV, PE
IX.	Marketing, Branding and Managing Fashion Enterprises 10. Basics of fashion marketing and consumer behavior 11. Branding and brand identity in fashion 12. Pricing, promotion, and distribution strategies 13. Digital marketing and e-commerce platforms 14. Production planning and quality control 15. Costing and financial management basics 16. Legal aspects: registration, GST, IPR, trademarks 17. Human resource management in small fashion units 18. Risk management and problem-solving	17	20	3	CO4	22, 25	Emp, Ent	R, N, G	G, HV, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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X.	Practical / Skill-Based Activities 7. Preparation of a mini business plan 8. Market survey and trend analysis 9. Branding and logo design for a fashion startup 10. Costing and pricing exercise 11. Presentation of fashion startup idea 12. Interaction with local entrepreneurs' / industry visit	5	15	5	CO3, CO4, CO5	23, 25	Emp, SD	L, N	G,HV,ES,PE
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Reference Books

1	Desai, V. (2011). <i>Dynamics of entrepreneurial development and management</i> (5th ed.). Himalaya Publishing House.
2	Panda, T. (2018). <i>Entrepreneurship development</i> . Sultan Chand & Sons.
3	Government of India, Ministry of Micro, Small and Medium Enterprises. (n.d.). <i>MSME development schemes and initiatives</i> . https://msme.gov.in
4	Government of India, Department for Promotion of Industry and Internal Trade. (n.d.). <i>Startup India: Action plan and schemes</i> . https://www.startupindia.gov.in
5	Rani, S., & Kumar, R. (2020). Fashion entrepreneurship in India: Challenges and opportunities. <i>Journal of Fashion Technology & Management</i> , 4(2), 45–52.

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid semester examination Class test	25	Written	Traditional essay type	For depth and planned and preparation	Semester Exam	50	Written mode	Traditional essay type	For depth and planned and preparation
Class assignment	15	Written	With defined time	Student's performance to make decision					
Home assignment	05	Written	With undefined time	Reinforce learning and facilitate mastery of specific skills					

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Attendance	05	-	-	-				
Total	50				Total	50		

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year 2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	E-COMMERCE IN FASHION: TRENDS & FORECASTING (Minor 8)	Credits / Hours per week					(4+0) 4hrs/week Theory= 60 hrs Total = 4 hrs/week		
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks					100 Marks / 36 Marks		
Mode Of Transaction		Lecture								
Course Outcome (CO) CO1 Explain the structure and functioning of global fashion systems and supply networks CO2 Evaluate fashion branding strategies and brand identity across different market segments CO3 Analyze global fashion marketing strategies and consumer behaviour patterns CO4 Interpret international quality, sustainability, and compliance requirements in fashion CO5 Assess emerging global fashion trends and future opportunities in fashion markets										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent))/ Skill Development t (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Theory										
VI.	Fashion E-Commerce Ecosystem 7. Evolution of E-Commerce in Fashion Industry 8. Types of Fashion E-Commerce Platforms (B2C, D2C, Marketplaces) 9. Omni channel Retailing in Fashion 10. Fashion Supply Chain Integration with E-Commerce		12	20	1,2	CO1	22,25	Emp, SD	G	PE, ES

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	11. Role of Technology in Online Fashion Retail 12. Case Studies of Leading Fashion E-Commerce Platforms								
VII.	Digital Consumer Behaviour in Fashion 7. Online Fashion Consumer Decision-Making 8. Factors Influencing Online Apparel Purchase 9. Role of Reviews, Ratings, and Social Proof 10. Gender and Cultural Influences in Online Fashion Consumption 11. Personalization and Customer Experience 12. Global vs Local Online Fashion Consumers	12	20	3,4	CO2	22,25	Emp, SD	N,G	PE, HV,G
III.	Fashion Trends & Forecasting in E-Commerce 7. Concept of Fashion Trends and Forecasting 8. Short-term and Long-term Forecasting 9. Trend Forecasting Agencies and Online Reports 10. Use of Big Data and AI in Trend Prediction 11. Social Media, Search Data, and Trend Signals 12. Case Studies of Trend-Driven Online Fashion Brands	12	20	4	CO3	22,26	Emp, SD	G	PE, ES
IX.	Digital Merchandising, Marketing & Analytics 7. Online Visual Merchandising for Fashion 8. Product Presentation, Styling, and Content Creation 9. Digital Fashion Marketing and Influencer Strategies 10. Pricing, Promotions, and Demand Forecasting 11. Introduction to Fashion E-Commerce Analytics 12. Performance Metrics and KPIs	12	20	4,5	CO4	21,25	Emp, SD	G	PE, HV

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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X.	Future Trends & Sustainable Fashion E-Commerce 7. AI, AR/VR, and Virtual Try-On Technologies 8. Social Commerce and Live Shopping 9. Circular Fashion and Re-commerce Platforms 10. Sustainability Challenges in Fashion E-Commerce 11. Ethical Issues and Data Privacy 12. Emerging Careers in Fashion E-Commerce & Forecasting	12	20	5	CO5	25,26	Emp, SD	G	PE, ES, G
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

References

7.	McKinsey & Company. (2024). <i>The state of fashion 2024</i>
8.	Euromonitor International. (2023). <i>Digital consumer trends in fashion</i> .
9.	World Economic Forum. (2020). <i>Shaping the future of digital commerce</i> .
10.	United Nations Environment Programme. (2019). <i>Sustainability and circularity in the textile value chain</i> . UNEP.
11.	Kim, J., & Lennon, S. J. (2019). <i>E-commerce and consumer behaviour in fashion</i> . Springer.
12.	Jackson, T., Shaw, D., & Drury, S. (2018). <i>Fashion marketing</i> (2nd ed.). Palgrave Macmillan.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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 Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda NAAC Accredited "A+" Grade		Academic Year					2026-27				
B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0											
Year	IV	On Job Training-I			Credits / Hours per week			06(0+6)12 hrs/week Practical= 12 hrs/week Total= 180 hes			
Semester	I	Year of Introduction: 2023-2024 Year of Syllabus Revision:			Maximum Marks / Minimum Marks			100 Marks / 36 Marks			
Mode Of Transaction		Field work									
Course Outcome (CO) CO1: Apply theoretical knowledge in real industrial apparel settings CO2: Understand organizational structure, workflow, and professional practices CO3: Develop technical skills related to apparel production and merchandising CO4: Demonstrate workplace ethics, teamwork, and communication skills CO5: Analyze industry problems and suggest practical solutions											
Unit No.	Topic			Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/ Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Practical											
I.	Industry Orientation & Work Culture 1. Overview of fashion and apparel industry. 2. Organizational structure and hierarchy. 3. Roles and functions of departments. 4. Industrial work culture and professional ethics. 5. Workplace safety and hygiene practices.			30	16	2	CO1	21	Emp / SD	L, N	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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II.	Apparel Production Processes 1. Fabric inspection and spreading techniques. 2. Cutting processes and marker planning. 3. Sewing line operations and workflow. 4. Industrial sewing machines and attachments. 5. Finishing processes and packing methods. 6. Introduction to productivity and efficiency concepts.	30	17	3	CO2	21	SD	N, G	ES
III.	Quality Control & Compliance 1. Importance of quality in apparel manufacturing. 2. Quality checkpoints during production. 3. Identification and classification of garment defects. 4. In-process and final inspection procedures. 5. AQL standards and quality documentation. 6. Introduction to buyer compliance requirements.	30	17	3	CO3	21	Emp / SD	N, G	PE
IV.	Design & Product Development Exposure 1. Fashion trend analysis and forecasting. 2. Mood board and concept development. 3. Fabric and trim selection. 4. Garment specifications and measurement charts. 5. Tech pack preparation. 6. Sampling process and approvals.	30	17	4	CO4	21	SD	G	ES
V.	Industrial Documentation & Mini Project 1. Production planning and control documents. 2. Line balancing and efficiency reports. 3. Quality and inspection reports. 4. Daily work log maintenance. 5. Identification of industry problem. 6. Mini project report preparation and presentation.	30	17	4	CO5	21	Emp / Ent	G	PE
VI.	Business Operations & Support Functions in Apparel Industry 1. Supply chain and logistics: Sourcing, vendor coordination, inventory, warehousing, packaging, shipment basics 2. HR & Administration: Recruitment, Payroll, attendance, labor policies, employee welfare	15	8	2	CO2	21	Emp / SD	N, G	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	3. Finance & Accounts: Budgeting, Costing basics, invoicing, purchase orders, financial documentation awareness								
VII.	Documentation, and Evaluation 1. Industrial training diary maintenance 2. Preparation of internship report 3. Oral presentation and viva-voce	15	8	2	CO2	21	Emp / SD	N, G	P

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Co-curricular work	50	Practical	Component of working with one's hand	For immediate feedback	Viva	30	Oral	Individually on in small group	Practical experience towards job interview situation
					Report	20	Written	On activity performed or event observed	Develop a key transferable skill
Total	50				Total	50			

 सत्यं विद्मं मुन्दरम् Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SEMESTER II

(Without Research)

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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**FOURTH YEAR
COURSES OFFERED BY
FASHION AND APPAREL TECHNOLOGY PROGRAMME
Without Research**

Year (Level)	Semester	Course Name	Credit	Course type
IV (6.0)	8	Lean Management	4(4+0)	Major 20
		Apparel Retailing & Merchandising	4(3+1)	Major 21
		Logistics & Supply Chain Management	4(4+0)	Major 22
		1 minor courses from a basket of 6 courses		
		Fashion Business Operations: Buying and Merchandising	4(4+0)	Minor 9
		On Job Training – II	6(0+6)	OJT
		TOTAL	22(12+10)	
Award of UG Honours Degree in Major course with 176 credits				

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Lean Management (Major 20)	Credits / Hours per week				4 (4+0) 4 hrs/week Theory = 60 hrs Total = 60 hrs/week			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Grade				100 Marks / 36 Marks			
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Explain the principles, philosophy, and evolution of lean management and its relevance to the clothing and textile industry. CO2 Apply lean tools and techniques to analyze and improve processes in apparel manufacturing systems. CO3 Analyze lean supply chain practices to reduce waste and improve efficiency in textile and apparel operations. CO4 Evaluate lean implementation strategies and case studies for improving productivity, sustainability, and competitiveness. CO5 Assess the role of digitalization, Industry 4.0, and human-centric lean practices in future apparel manufacturing systems										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
VI.	Introduction to lean management 6. Philosophy and evolution of lean thinking 7. Toyota Production System		12	20	2	CO1		Emp, SD	N, G	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	8. Principles of lean thinking 9. Types of waste 10. Relevance of lean in textile and apparel industry.								
VII.	Lean tools and techniques 7. 5S 8. Value Stream Mapping 9. Just-In-Time 10. Kaizen 11. Line balancing 12. setup time reduction.	12	20	3	CO2		Emp, SD	N, G	ES, PE
VIII.	Lean supply chain management 5. Concepts and waste identification, 6. Lean procurement 7. Vendor coordination, 8. Inventory reduction, and integration with sustainable practices.	12	20	4	CO3		Emp, SD	G	ES
IX.	Lean implementation 5. Framework, 6. Performance measurement, 7. Industry case studies, 8. Lean for sustainability, and future trends in fashion and textile industry.	12	20	5	CO4		Emp, Ent	G	ES, HV, PE
X.	Digital Lean, Industry 4.0 and Human-Centric Lean 6. Integration of Lean with Industry 4.0	12	20	5,6	CO5	21,25,26	Emp, Ent	G	ES, HV, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
---	----------------------	----------------

7. Digital tools for lean manufacturing (IoT, RFID, data analytics – overview) 8. Smart factories and lean automation in apparel industry 9. Human-centric lean: ergonomics, skill development, and worker well-being 10. Future of lean manufacturing in global apparel industry								
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			

Reference Books	
6.	Nayak, R. (Ed.). (2022). <i>Lean supply chain management in fashion and textile industry</i> . Springer.
7.	Jana, P., & Tiwari, M. (Eds.). (2021). <i>Lean tools in apparel manufacturing</i> . Elsevier.
8.	International Labour Organization. (2019). <i>Lean manufacturing techniques for textile industries</i> (PDF). International Labour Organization
9.	Bhasin, S. (2015). <i>Lean Management Beyond Manufacturing: A Holistic Approach</i> . London: Springer International Publishing.
10.	Charron, R., Harrington, J., Voehl, F., & Wiggin, H. (2015). <i>The Lean Management Systems Handbook</i> . London: CRC Press.

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Apparel Retailing and Merchandising (Major 21)	Credits / Hours per week				4 (3+1) 5 hrs/week Theory = 45 hrs Practical = 30hrs Total =75 hrs/week			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Grade				100 Marks / 36 Marks			
Mode of Transaction		Lecture and Practical								
Course Outcome (CO) CO1: Explain the structure and functioning of the apparel retail industry and its evolution. CO2: Analyze consumer behaviour and market trends influencing apparel retailing. CO3: Apply principles of merchandise planning, buying, and sourcing in apparel retail. CO4: Evaluate pricing, promotion, and supply chain strategies in apparel merchandising. CO5: Design effective visual merchandising and store presentation strategies. CO6: Use basic retail analytics and technology tools for decision-making in apparel retail.										
Unit No.	Topic		Contact Hours	Weight age (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
VI.	Introduction to Apparel Retailing 5. Concept and scope of apparel retailing 6. Evolution of apparel retail: Global and Indian perspective		11	20	L2	CO 1	22, 25	EMP	L, N, G	G, HV, PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
--	--	----------------------	----------------

	7. Types of retail formats: Department stores, specialty stores, fast fashion, online and Omni channel retail 8. Roles and responsibilities of apparel retailers								
VII.	Consumer Behaviour and Fashion Markets 5. Apparel consumer behaviour: Psychological, social, and cultural influences 6. Fashion adoption process and diffusion of fashion 7. Market segmentation, targeting, and positioning (STP) 8. Trend forecasting and market research methods	11	20	L4	CO 2	22, 25	Emp, SD	L, N, G	G, ES, HV,PE
VIII.	Apparel Merchandising and Buying 5. Principles of apparel merchandising 6. Merchandise planning and assortment planning 7. Buying organization and buying process 8. Vendor selection, sourcing strategies, and ethical sourcing	11	25	L3	CO 3	21, 22, 23	Emp, Ent, SD	N, G	G, ES, HV,PE
IX.	Retail Operations, Pricing & Retail Technology 11. Pricing strategies in apparel retail 12. Markups, markdowns & profit planning 13. Apparel supply chain management & logistics	12	25	L5 L6	CO 4 CO 5 CO 6	21, 22 23, 25	Emp, SD	N, G	G, ES, HV,PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
---	----------------------	----------------

	14. Inventory management and retail operations 15. Branding & retail communication 16. Sales promotion and CRM 17. Role of technology in apparel retailing 18. E-retailing, omnichannel strategies 19. Retail analytics & KPIs 20. Sustainability and future trends in apparel retail								
X.	Practical / Experiential Learning 7. Case study analysis of leading apparel retailers 8. Consumer survey & market analysis report 9. Merchandise assortment planning & planogram development 10. Visual merchandising display project 11. Retail store visit / virtual retail audit 12. Basic retail analytics exercise (KPI calculation)	15	10	L6	CO3, CO5, CO6	23, 24, 25, 26	Emp, Ent, SD	L, N, G	G, ES, HV, PE

Reference Books

1	Berman, B., & Evans, J. R. (2018). <i>Retail management: A strategic approach</i> (13th ed.). Pearson Education.
2	Diamond, J., Diamond, E., & Litt, S. (2015). <i>Fashion retailing: A multi-channel approach</i> . Fairchild Books.
3	Easey, M. (2009). <i>Fashion marketing</i> (3rd ed.). Wiley-Blackwell.
4	Goworek, H., McGoldrick, P., McGuinness, M., & Perry, P. (2016). <i>Retail marketing management: Principles and practice</i> . Pearson Education.
5	Levy, M., Weitz, B. A., & Grewal, D. (2020). <i>Retailing management</i> (10th ed.). McGraw-Hill Education.
6	Posner, H. (2015). <i>Marketing fashion</i> (2nd ed.). Laurence King Publishing.

SUGGESTED EVALUATION	
CCE (50% IA)	SEE (50% UA)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	20	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	10	Written	Traditionally essay type	Fixed date forces students to learn					
Lab work	20	Practical	Component of working with one's hand	Keep the students on the task					
Total	50				Total	50			

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year 2026-27
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B. Sc. (F.T.) Fashion and Apparel Technology fourth Year – Level 6.0										
Year	IV	Logistics & Supply Chain Management (Major 22)		Credits / Hours per week				4 4+0) 4 hrs/week Theory = 60 hrs Total = 60 hrs/week		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:		Maximum Marks / Grade				100 Marks / 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1 Explain fundamental concepts and components of logistics and supply chain management CO2 Apply logistics and supply chain planning techniques in textile and apparel operations CO3 Analyze procurement, inventory, and distribution strategies for supply chain efficiency CO4 Evaluate global logistics systems, risk management, and sustainability practices CO5 Assess emerging trends and digital technologies shaping future supply chains										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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VI.	UNIT I: Introduction to Logistics and Supply Chain Management 6. Concepts and scope of logistics and supply chain management 7. Components of supply chain: suppliers, manufacturers, distributors, retailers 8. Logistics vs supply chain management 9. Role of SCM in textile and apparel industry 10. Objectives and performance measures of SCM	12	20	2	CO1	21,25	Emp, SD	N, G	PE
VII.	Procurement and Inventory Management 6. Procurement processes and sourcing strategies 7. Supplier selection and evaluation 8. Inventory types and inventory control techniques 9. Just-in-Time (JIT) and lean inventory concepts 10. Warehousing and storage systems	12	20	3	CO2	21,24	Emp, SD	N, G	ES, PE
VIII.	Logistics Operations and Distribution Management 6. Transportation modes and selection	12	20	4	CO3	22,25	Emp, SD	G	ES, HV

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	7. Distribution network design 8. Packaging, handling, and material movement 9. Apparel distribution and retail logistics 10. Reverse logistics and returns management								
IX.	Global Supply Chain, Risk and Sustainability 6. Global sourcing and international logistics 7. Trade regulations and documentation 8. Supply chain risks and resilience 9. Sustainable supply chain practices 10. Ethical and social compliance in logistics	12	20	4,5	CO4	21,25	Emp, SD	G	ES, HV,PE
X.	Digital Supply Chain and Future Trends 6. Role of information systems in SCM 7. Digital technologies: ERP, RFID, IoT (overview) 8. Data analytics in supply chain decision-making 9. E-commerce logistics and omni-channel supply chains 10. Future trends and career opportunities in SCM	12	20	5	CO5	25,26	Emp, SD	G	ES, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Mid-semester exam	25	Written	Traditionally essay type	For depth and planned preparation	semester exam	50	Written	Traditionally essay type	For depth and planned preparation
Class test	20	Written	Traditionally essay type	Fixed date forces students to learn					
Attendance	05								
Total	50				Total	50			
Reference Books									
7.	Chopra, S., & Meindl, P. (2022). <i>Supply chain management: Strategy, planning, and operation</i> (8th ed.). Pearson.								
8.	United Nations Conference on Trade and Development. (2021). <i>Review of maritime transport</i> . UNCTAD.								
9.	World Trade Organization. (2020). <i>World trade statistical review</i> . WTO.								
10.	Organisation for Economic Co-operation and Development. (2018). <i>Due diligence guidance for responsible supply chains in the garment and footwear sector</i> . OECD Publishing.								
11.	Hugos, M. (2018). <i>Essentials of supply chain management</i> (4th ed.). Wiley.								
12.	Christopher, M. (2016). <i>Logistics and supply chain management</i> (5th ed.). Pearson Education.								

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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Year	IV	Fashion Business Operations: Buying and Merchandising (Minor 9)	Credits / Hours per week					4 4+0) 4 hrs/week Theory = 60hrs Total = 60 hrs		
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Grade					100 Marks / 36 Marks		
Mode of Transaction		Lecture								
Course Outcome (CO) CO1: Explain the structure and scope of fashion business operations at national and international levels. CO2: Describe the roles and responsibilities of buyers and merchandisers in fashion organizations. CO3: Analyze fashion trends, consumer behavior, and market data for buying decisions. CO4: Apply merchandising principles such as assortment planning, pricing, and inventory control. CO5: Evaluate sourcing strategies, vendor management, and negotiation processes. CO6: Assess the impact of retail analytics, technology, and sustainability on fashion buying and merchandising.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability (Emp)/ Entrepreneurship (Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R)/Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV)and Professional Ethics (PE)
VI.	Fashion Business Operations – An Overview 5. Structure of the fashion industry 6. Fashion value chain and business functions 7. Fashion retail formats and business models 8. Domestic and global fashion markets		12	20	L2	CO1	PSO 21, 22	Emp	N, G	G, ES, HV, PE

 NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda Estd. 1949	Academic Year	2026-27
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VII.	Fashion Buying Principles and Processes 5. Role and responsibilities of a fashion buyer 6. Buying cycle and seasonal calendars 7. Trend forecasting and fashion information sources 8. Market research and consumer demand analysis	12	20	L3	CO2 , CO3	PSO 21, 22	Emp, SD	N, G	G, HV, PE
VIII.	Fashion Merchandising Concepts 5. Role of fashion merchandiser 6. Merchandise planning and control 7. Assortment planning and line planning 8. Product life cycle and fashion diffusion	12	20	L4	CO3 , CO4	PSO 22, 24	Emp, SD	L, N, G	G, HV, PE
IX.	Pricing, Costing and Inventory Management 5. Cost components in fashion products 6. Pricing strategies and mark-up calculations 7. Markdown planning and profitability analysis 8. Inventory control techniques and stock performance measures	12	20	L4	CO4	PSO 21, 24	Emp, SD	N, G	ES, HV, PE
X.	Sourcing, Vendor Management and Negotiation 5. Domestic and global sourcing strategies 6. Vendor evaluation and selection 7. Ethical sourcing and compliance issues 8. Negotiation techniques and buyer-vendor relationships	12	20	L5	CO5	PSO 21, 22, 23	Emp, Ent, SD	N, R, G	G, ES, HV, PE

Reference Books

1	Goworek, H. (2010). <i>Fashion buying and merchandising</i> . Wiley-Blackwell.
2	Easey, M. (2009). <i>Fashion marketing</i> (3rd ed.). Wiley-Blackwell.
3	Fashionary. (2019). <i>The fashion business manual: An illustrated guide to branding, buying, and marketing</i> . Fashionary International Ltd.
4	McKinsey & Company. (n.d.). <i>Fashion and retail reports</i> . McKinsey & Company.

SUGGESTED EVALUATION	
CCE (50% IA)	SEE (50% UA)

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Class Test	10	Written	Traditional essay type	Fixed date force students to learn	Semester exam	50	Written	Traditional essay type	For depth and planned preparation
Mid semester class test	25	Written	Traditional essay type	For depth and planned preparation					
Case study	10	Written	Analyze a given case (real or fictional)	To assess thinking, value and attitude					
Attendance	05	-	-	-					
Total	50				Total	50			

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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 सत्यं विदुषं मुन्दरम् Estd. 1949	Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda NAAC Accredited "A+" Grade		Academic Year				2026-27			
B. Sc. (F.T.) Fashion and Apparel Technology Fourth Year – Level 6.0										
Year	IV	On Job Training-II	Credits / Hours per week				06(0+6)/12 hrs/week Total= 180 hes			
Semester	II	Year of Introduction: 2023-2024 Year of Syllabus Revision:	Maximum Marks / Minimum Marks				100 Marks / 36 Marks			
Mode Of Transaction		Field work								
Course Outcome (CO) CO1: To provide advanced industry exposure through specialized departmental training and independent responsibility handling. CO2: To develop practical competence in merchandising, costing, supply chain, and inventory management. CO3: To enhance analytical and problem-solving skills by addressing real-time industrial problems. CO4: To promote awareness and application of sustainability and ethical practices in apparel operations. CO5: To prepare students for professional careers through industry projects, documentation.										
Unit No.	Topic		Contact Hours	Weightage (%)	BT Level	CO	PSO	Elements of Employability(Emp)/ Entrepreneurship(Ent)/ Skill Development (SD)	Relevance to Local (L)/ National (N)/ Regional(R) /Global (G)	Relation to Gender (G), Environment and Sustainability (ES), Human Values (HV) and Professional Ethics (PE)
Practical										

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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I.	Advanced Departmental Training / Specialization 1. Selection of specialization area. 2. Advanced operational practices. 3. Independent task handling. 4. Decision-making and responsibility sharing. 5. Inter-departmental coordination. 6. Performance evaluation and feedback.	30	16	3	CO1	21	Emp / SD	N, G	PE
II.	Merchandising & Costing 1. Role of merchandising in apparel industry. 2. Order processing and buyer communication. 3. Sampling coordination and approvals. 4. Cost sheet preparation. 5. Fabric, trim, and overhead costing. Pricing strategies and profit analysis.	30	17	4	CO2	21	Emp / SD	G	PE
III.	Supply Chain & Inventory Management 1. Overview of apparel supply chain. 2. Fabric and trim sourcing. Vendor selection and coordination. 3. Inventory control methods. 4. Stock management systems. 5. Logistics and delivery management.	30	17	4	CO3	21	Emp	N, G	ES
IV.	Sustainability & Ethical Practices 1. Concept of sustainability in fashion. 2. Sustainable fibers and materials. 3. Eco-friendly manufacturing practices. 4. Waste reduction and recycling. 5. Ethical sourcing and fair labor practices.	30	17	4	CO4	21	SD	G	ES, HV
V.	Major Industry Project & Career Readiness 1. Identification of real-time industry problem. 2. Project planning and execution.	30	16	5	CO5	21	Emp / SD	G	PE

 Estd. 1949	NAAC Accredited "A+" Grade Institute of Fashion Technology Faculty of Family and Community Sciences The Maharaja Sayajirao University of Baroda	Academic Year	2026-27
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	3. Data collection and analysis. 4. Design or process innovation.								
VI.	Industry documentation 1. Maintain Daily logbook 2. Departmental work report preparation 3. Production sheet and checklist 4. Confidentiality and Data Handling ethics	15	7	5	CO5	21	Emp / SD	G	PE
VII.	Report writing 1. Final report documentation and presentation 2. Resume and portfolio preparation	15	8	5	CO5	21	Emp / SD	G	PE

SUGGESTED EVALUATION									
CCE (50% IA)					SEE (50% UA)				
Evaluation type	Marks	Mode	Nature	Objective	Evaluation type	Marks	Mode	Nature	Objective
Co-curricular work	50	Practical	Component of working with one's hand	For immediate feedback	Viva	30	Oral	Individually on in small group	Practical experience towards job interview situation
					Report	20	Written	On activity performed or event observed	Develop a key transferable skill
Total	50				Total	50			