KUMARAGURU COLLEGE OF TECHNOLOGY,

An autonomous Institution affiliated to Anna University, Chennai

COIMBATORE – 641 049.

B.Tech., FASHION TECHNOLOGY

REGULATIONS R2024

(From 2024-2025 batch onwards)

CURRICULUM AND SYLLABI

I to IV

2

VISION

Achieve excellence in academics and research and face the challenges of fashion and clothing industry

MISSION

- Develop core competencies with a curriculum encompassing design, manufacture, and management domains.
- Develop the competency of the faculty to the level of international repute through state-of-the-art infrastructure and facility, focus on research and upskilling.
- Stimulate analytical and creative thinking to transform the students as socially responsible, competent professionals, entrepreneurs, researchers useful to the society, through innovative teaching learning
- Promote collaborations with industry to comprehend global practices leading to excellence.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

Graduates of B.Tech (Fashion Technology) will be able to

PSO1: Excel in their professional career related to fashion, design, manufacturing, management, and research

PSO2: Identify problems in the apparel domain and provide techno- economic solutions focusing on the needs of industry and society.

PSO3: Imbibe awareness on the significance of professional and social ethics in their professional career.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development.

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required.

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions.

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems.

PO6: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment.

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws.

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change.

KUMARAGURU COLLEGE OF TECHNOLOGY
FASHION TECHNOLOGY
REGULATION 2024

B.Tech -Fashion Technology - Curriculum

Semester I

S.No	Course code	Course Title	Course Type	Course Category	L	T	P	J	C
1	24HST101	Heritage of Tamils	Theory	HS	1	0	0	0	1
2	24MAI112	Computational Linear Algebra and Calculus	Embedded	BS	3	0	2	0	4
3	24CYI105	Textile and Apparel Chemistry	Embedded	BS	3	0	2	0	4
4	24CSI101	Logical Thinking and Problem Solving	Embedded	ES	3	0	2	0	4
5	24ADP001	Basics of Artificial Intelligence	Practical	ES	0	0	2	0	1
6	24FTI101	Fashion Elements	Embedded	PC	2	0	2	0	3
7	24INP102	Innovation Practicum - 1	Practical	ES	0	0	2	0	1
8	24HSP111	Holistic Wellness - 1	Practical	HS	0	0	2	0	1
9	24INP101	Design Thinking	Practical	HS	0	0	2	0	1
10	24INO1--	FCLF – General Stack -1	Practical	OE	0	0	2	0	1
								Total Credits	**21**
								Total Contact Hours/week	**30**

Semester II

S.No	Course code	Course Title	Course Type	Course Category	L	T	P	J	C
1	24HST102	Tamils and Technology	Theory	HS	1	0	0	0	1
2	24HST103/ 24HST104	Effective Communication/ Professional Communication	Theory	HS	2	0	0	0	2
	24HSJ102	Fluency through practice	Practical	HS	0	0	0	4	
3	24MAI122	Advanced Computational Calculus	Embedded	BS	3	0	2	0	4
4	24PHI103	Applied Physics for Textile Technology	Embedded	BS	3	0	2	0	4

5	24CYT106	Functional Textile Materials and Its Applications	Theory	ES	3	0	0	0	3
6	24MEI101	Engineering Graphics	Embedded	ES	2	0	2	0	3
7	24FTI102	Textile Material Science	Embedded	ES	2	0	2	0	3
8	24INP103	Innovation Practicum - 2	Practical	ES	0	0	2	0	1
9	24HSP112	Holistic Wellness - 2	Practical	HS	0	0	2	0	1
10	24INO1--	FCLF – General Stack - 2	Practical	OE	0	0	2	0	1
Total Credits									**23**
Total Contact Hours/week									**30**

Semester III									
S.No	**Course code**	**Course Title**	**Course Type**	**Course Category**	**L**	**T**	**P**	**J**	**C**
1	24HSP005	Mastering Conversations	HS	Practical	0	0	2	0	1
2	24MAI232	Applied statistics for Engineers	BS	Embedded	3	0	2	0	4
3	24FTT201	Fashion Pattern Making	PC	Theory	3	0	0	0	3
4	24FTP202	Pattern Drafting Laboratory	PC	Practical	0	0	2	0	1
5	24FTT203	Concepts of Fashion Formulation	PC	Theory	3	0	0	0	3
6	24FTP204	Fashion Illustration Laboratory	PC	Practical	0	0	2	0	1
7	24FTT205	Yarn and Fabric Manufacturing	PC	Theory	3	0	0	0	3
8	24FTT206	Sewing Techniques and Apparel Design	PC	Theory	3	0	0	0	3
9	24FTP207	Garment components Laboratory	PC	Practical	0	0	2	0	1
10	24INP201	Innovation Practicum - 3	ES	Practical	0	0	2	0	1
11	24INM201	Universal Human Values II: Understanding Harmony	HS	Theory	1	0	0	0	1
12	24INO___	FCLF - General Stack - 3	OE	Practical	0	0	2	0	1
13	24FTJ208	Internship -I	PRJ	Internship	0	0	0	2	1
								Total Credits	**24**
								Total Contact Hours/week	**30**

Semester IV									
S.No	**Course code**	**Course Title**	**Course Type**	**Course Category**	**L**	**T**	**P**	**J**	**C**
1	24HSP006	Group Discussion and Presentation Skills	HS	Practical	0	0	2	0	1
2	24FTT208	Knitting and Non wovens	PC	Theory	3	0	0	0	3
3	24FTI209	Fashion Fabrics and Decorative Techniques	PC	Embedded	2	0	2	0	3
4	24FTI210	Textile chemical processing and finishing	PC	Embedded	2	0	2	0	3
5	24FTT211	Apparel Design and Pattern Drafting Techniques	PC	Theory	3	0	0	0	3
6	24FTP212	Apparel Construction Laboratory	PC	Practical	0	0	2	0	1
7	24FTP213	Apparel CAD Laboratory	PC	Practical	0	0	2	0	1
8	24FTT214	Apparel Machinery and Mechanism	ES	Theory	3	0	0	0	3
9	24INM202	Environmental Science and Sustainability	BS	Theory	2	0	0	0	2
10	24INP202	Innovation Practicum - IV	ES	Practical	0	0	2	0	1
11	24INO___	FCLF - Technical Stack	OE	Practical	0	0	2	0	1
12	24INO___	FCLF - Emerging Stack	OE	Practical	0	0	2	0	1
13	24INM102	Indian Knowledge System	HS	theory	2	0	0	0	1
								Total Credits	**24**
								Total Contact Hours/week	**33**

SEMESTER III

24FTT201	FASHION PATTERN MAKING	L	T	P	J	C
		3	0	0	0	3
PC		SDG	4, 9			

Pre-requisite courses	24FTI101	Data Book / Code book (If any)	--

Course Objectives:	
The purpose of taking this course is to:	
1	Apprise the body measurements and develop basic block pattern set.
2	comprehend pattern manipulation techniques and derive style variations.
3	explore draping principles and incorporate drape lines in patterns.
4	interpret the size intervals, infer grading rules and practice grading.
5	customize the sewing patterns according to the design brief

Course Outcomes:	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Levels (RBT)
CO 1	Apply pattern making processes, tools, and techniques to construct bodice, skirt, and sleeve patterns	Ap
CO 2	Apply dart manipulation methods and fit concepts to derive pattern modifications	Ap
CO 3	Assess the role of draping techniques to design and develop garment shapes, interpreting drape details for pattern creation.	Ap
CO 4	Analyse the size intervals of different sizing systems and plot the grading rules to scale patterns accurately for different sizes.	Ap
CO 5	Adapt fashion patterns for dresses, jumpsuits, and palazzo pants from basic patterns.	Ap

Course Outcomes (CO)	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	3	2	-	3	-	-	-	-	-	2	3	-	-
2	3	3	2	-	-	3	-	-	-	-	2	3	2	2
3	3	3	3	2	-	-	-	-	-	-	2	3	-	2
4	3	3	-	3	2	3	-	-	-	-	2	3	2	2
5	3	3	3	-	3	2	-	-	-	-	2	3	2	2

Course Content

PATTERN FOUNDATION Pattern making process. Measurements – Tools and Techniques, Direct measurements and indirect measurements. Sizing systems – introduction, factors affecting sizing, industrial sizing systems – Kids, Women, Men. Flat pattern making – bodice pattern, skirt pattern, sleeve pattern, Trouser pattern. Pattern labelling details.	**10 Hours**
PATTERN MANIPULATION Contouring principles, Dart manipulation methods – Pivot and Slash methods. Sub principles of dart manipulation. Fit concepts – elements of fit, style ease and fitting ease – ease determination methods.	**8 Hours**
DRAPING Fabric layout and drapability. Principles of draping – basic bodice and skirt. Creating Draping lines in skirts – gathers, pleats, cowls, folds, ruffles. Creating shapes in skirts - flare and volume, circular skirts. Fashion draping - Interpretation of drape details, proportions, developing draping plan. Fabric to paper – pattern transfer.	**9 Hours**
GRADING Grading introduction - sizing systems, Size intervals, plotting grading rules, base size. Types of grading – Manual grading, Computerized grading, 3 D grading. Pattern balance points. Types of pattern layout and pattern terminologies.	**9 Hours**
CUSTOMIZING SEWING PATTERNS Size specification - Standardizing measurements, size intervals. Dress patterns from blocks – Sheath dress, Long tops, jump suits, palazzo pants. Case studies of preparing fashion patterns from basic blocks.	**9 Hours**

Theory	Tutorial	Practical	Project	Total
Hours:45	Hours: 0	Hours:0	Hours:0	Hours:45

Learning Resources

Textbooks:

Jo Barnfield and Andrew Richards, The Essential Guide to Pattern Making: All You Need to Know About Designing, Adapting and Customizing Sewing Patterns, Search press Ltd, (2024)

References:

1. Padmavathi, Techniques of Drafting and Pattern Making: Garments for Kids and Adolescents, Atlantic Publishers and Distributors (P) Ltd (2024).
2. Antonio Donnanano, Fashion pattern making techniques Vol. 2, Promo press (2016).
3. Gina Renee Dunham, The fitting book, Gina Renee Designs, (2021).
4. Helen Joseph Armstrong, pattern making for fashion design, Pearson education India (2013).
5. Francesca Sterlacci (Author), Barbara Arata-Gavere (Editor), Barbara Seggio (Editor) Pattern making : techniques for beginners, Laurence King Publishing; Illustrated edition (2019),

Online Educational Resources:

https://audaces.com/en/blog/pattern-making

Assessment (Theory course)

SA, Activity and Learning Task(s), Mini project, MCQ, End Semester Examination (ESE)

Course Curated by

Expert(s) from Industry	Expert(s) from Higher Education Institution	Internal Expert(s)
Mr.Santhosh Raman, Managing Director, 5ifty2, Manufacturing & Sourcing company, Tirupur	Dr.Ramachandran R, Professor, Master of Fashion Management, National Institute of Fashion Technology, Kannur	Dr.V.Nithyaprakash, Associate Professor, Department of Fashion Technology, Kumaraguru College of Technology

Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	226/06/2025

24HSP005	MASTERING CONVERSATIONS	L	T	P	J	C
		0	0	2	0	1
HS		SDG	4 & 8			

Pre-requisite courses -	-	Data Book / Codes / Standards (If any)	-

Course Objectives:	The purpose of taking this course is to
1	Demonstrate understanding of different perspectives by analyzing complex personal and professional situations.
2	Engage in thoughtful dialogue and discussions about complex, real-world issues, utilizing critical thinking to assess different viewpoints.
3	Apply role-playing as a tool to enhance understanding of workplace dynamics, conflict resolution, and team collaboration.

Course Outcomes:	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Level (BTL)
CO 1	Empathize with and understand people in both professional and personal contexts, reflecting on situations from multiple perspectives and participating in activities that mirror career-related scenarios	Ap
CO 2	Analyze and converse critically on complex subjects, demonstrating the ability to approach and deal with various social contexts effectively	An
CO 3	Exhibit skills in role-playing and enacting given situations to navigate diverse social interactions and career-related contexts.	C

	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
Course Outcomes (CO)	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1						3			3	2	3			
2									1	2				
3									3	2				

Course Content

PRACTICAL COMPONENT / ROLEPLAYS DYNAMICS Introduction to Role play - Benefits of role plays - Importance of gesture, tone and modulation- Skill development through role play activities - Types of role plays -Conversation Building through communicative functions-Initiating a dialogue- Framing questions- Receiving feedback	**6 Hours**
PRACTICAL COMPONENT /ROLEPLAYS ON SOCIAL SKILL	**6 Hours**

Social Interactions: - (Ordering food at a restaurant- Making a reservation at a hotel-- Shopping at a store-- Attending a party or social gathering) Travel and Tourism:(Asking for directions- Booking a flight or hotel-- Exploring a new city- Interacting with local people) Community and Volunteering:(Participating in a charity event- Volunteering at a local organization- Discussing community issues- Organizing a community project)	
PRACTICAL COMPONENT / ROLEPLAYS ON EDUCATION AND TECHNOLOGY Education and Personal Growth:(Setting goals-(Short term & Long term)- Creating a study plan- Participating in a workshop- Reflecting on personal growth) Technology and Online Interactions:(Participating in an online meeting- Creating a social media post- Writing an email or text message- Making an online purchase) Technology and Science:(Explaining a scientific concept- Discussing emerging technologies- participating in Hackathons- Presenting a research paper)	**6 Hours**
PRACTICAL COMPONENT / ROLEPLAYS ON STRATEGIC INSIGHTS Critical Thinking :(Evaluating a news article-solving a moral dilemma-Decision with incomplete information-Assessing a historical event) Problem-Solving:(Resolving a conflict- Negotiating a deal - Making a complaint- Apologizing for a mistake) Business and Entrepreneurship:(Pitching an idea- Negotiating a contract- Conducting a market Research- Presenting a product launch)	**6 Hours**
PRACTICAL COMPONENT / ROLEPLAYS ON CULTURAL EXCHANGE Cultural Exchange:(Sharing customs and traditions- Discussing cultural differences- Exploring historical events- Participating in a cultural festival) Media and Entertainment:(Event planning- Creating an advertisement-Digital Marketing-Conducting interviews- Creating news broadcast- Writing and Performing a script- Enacting one act plays) Arts and Culture:(Visiting an art gallery - Attending/ organizing a concert or play - Discussing literature- Creating a piece of art)	**6 Hours**

Theory Hours:	**Tutorial Hours:**	**Practical Hours: 30**	**Project Hours:**	**Total Hours:** 30

Learning Resources*
Textbooks
Reference books/ Web Links
1.Bonwell, C. C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom. Washington, DC: The George Washington University. 2. Harbour, E., & Connick, J. (2005). Role playing games and activities rules and tips. Retrieved from https://www.businessballs.com/roleplayinggames.htm 3. Lebaron, J., & Miller, D. (2005). The potential of jigsaw role playing to promote the social construction of knowledge in an online graduate education course. Retrieved from http://paws.wcu.edu/jlebaron/Jigsaw-FnlTCRpdf_050812.pdf 4. Davies, A. (2018). Teaching and learning through role-play: A practical guide. Maidenhead, UK: McGraw-Hill Education. 5. Young, K. C. (2016). The art of role play: Developing realistic scenarios for skill development. Boston, MA: Pearson. 6. Yardley-Matwiejczuk, K. M. (1997). Role play: Theory and practice. London, UK: SAGE Publications Ltd.
Online Resources
1. https://www.niu.edu/citl/resources/guides/instructional-guide 2. https://positivepsychology.com/role-playing-scripts/

Assessment	
Formative	Summative
Assignments / Mini project), Quiz, Lab	Quizzes and written assignments, Participation in group activities

Course Curated By		
Expert(s) from Industry	**Expert(s) from Higher Education Institutions**	**Internal Expert(s)**
Mr.Vijayan Ramanathan , Project manager, Toppan Merrill. Technologies, Coimbatore	Dr. Aninditha Sahoo, IIT, Madras Dr.P.R.Sujatha Priyadharshini, Anna University Chennai Dr. E. Justin Ruben, CIT, Coimbatore	Dr. Arokia Lawrence Vijay Dr. Tissaa Tony

Approved by: BoS Chairman	
BoS Approval date:	**16-8-2024**

24MAI232	APPLIED STATISTICS FOR ENGINEERS (Common to BT, FT, TT)	L	T	P	J	C
BS		3	0	2	0	4
		SDG	3, 8			

Pre-requisite courses	Frequency distribution, Sample and Population	Data Book / Codes / Standards (If any)	Statistical Tables

Course Objectives:	The purpose of taking this course is to:
1	introduce the concept of random variables and their probability distributions.
2	explore two-dimensional random variables, correlation, and regression analysis
3	provide knowledge of hypothesis testing using small and large sample tests.
4	explain the principles of experimental design and analysis of variance
5	familiarize students with statistical quality control techniques

Course Outcomes:	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Level (BTL)
CO 1	describe different types of random variables and their probability distributions.	Ap
CO 2	analyze joint distributions and measure relationships using correlation and regression techniques	An
CO 3	conduct hypothesis tests using Z-tests and Chi-square for large samples	Ap
CO 4	perform small sample hypothesis tests using t-tests and F-tests.	Ap
CO 5	apply ANOVA and experimental design methods for data analysis.	An
CO 6	construct and interpret control charts for process monitoring.	Ap

	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
Course Outcomes (CO)	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	2			2									
2	3	3			2									
3	3	3		2	1				2					
4	3	3		2	1				2					
5	3	3		1	3				2					
6	3	3		1	3				2					

Course Content

RANDOM VARIABLES — **9 Hours**

Axioms of probability - Conditional probability – Total probability – Baye's theorem -Random variable – Properties – Probability mass function – Probability density function – Distribution function - Binomial, Poisson and Normal distributions.

Practical Component — **6 Hours**

- Generate a Binomial distribution, plot its PMF and CDF, find the probability of a given range, and compute its mean and variance.

• Simulate Poisson and Normal distributions, visualize them using PMF and histograms, and calculate probabilities for given ranges.	
TWO DIMENSIONAL RANDOM VARIABLES AND CORRELATION AND REGRESSION Two dimensional random variables – Joint Density and Distribution Functions –Marginal distributions- Correlation – Karl Pearson's Correlation coefficient ((Discrete Data) – Regression lines. (Discrete Data). central limit theorem-Simple problems. **Practical Component** • Generate a two-dimensional discrete random variable, compute its joint probability distribution, and plot the joint probability mass function (PMF). • Compute Karl Pearson's and Spearman's Rank Correlation coefficients for a given discrete dataset, fit regression lines, and interpret the results.	**9 Hours** **6 Hours**
TESTING OF HYPOTHESIS Testing of hypothesis for large samples: single mean, difference of means- Small samples tests based on t and F distributions: single mean, difference of means, paired *t*- test and variance ratio test – Chi-square test for independence of attributes and goodness of fit. **Practical Component** • Perform hypothesis testing for large samples by conducting Z-tests for a single mean and difference of means and interpret the results. • Conduct t-tests (single mean, difference of means, and paired t-test), F-test for variance ratio, and Chi-square tests for independence of attributes and goodness of fit using given datasets.	**9 Hours** **6 Hours**
DESIGN OF EXPERIMENTS Analysis of Variance (ANOVA) – Completely Randomized Design (CRD) – Randomized Block Design (RBD) -Latin Square Design **Practical Component** • Conduct an ANOVA using a Completely Randomized Design (CRD) and a Randomized Block Design (RBD) on a given dataset and compare the treatment effects. • Perform a Latin Square Design ANOVA on provided data, analyze the treatment differences, and interpret the outcomes.	**9 Hours** **6 Hours**
STATISTICAL QUALITY CONTROL Concept of process control - Control charts for variables: Mean and Range charts – Control charts for attributes: p, np, c – charts. **Practical Component** • Construct and analyze Mean and Range ($\bar{X}$ and R) control charts for a given dataset to monitor process stability. • Develop p, np, and c control charts for attribute data, interpret the control limits, and determine if the process is in control.	**9 Hours** **6 Hours**

Theory Hours: 45	Tutorial Hours:	Practical Hours: 30	Project Hours:	Total Hours: 75

Learning Resources

Textbooks

1. Walpole R. E., Myers S.L. & Keying Ye, "Probability and Statistics for Engineers andScientists",Pearson EducationInc, 10th edition, 2020.

2. Charles Henry Brase and Corrinne Pellillo Brase “Understandable Statistics”, Cengage Learning Company,Toronto, 12th edition, 2016.
3. Andy Field, Jeremy Miles, and Zoë Field, “Discovering Statistics Using R”, Sage Publications, 1st edition, 2012.

Reference books

1. Johnson R. A., Miller & Freund’s “Probability and Statistics for Engineers”, 9th Edition, Pearson Education, Delhi, 2017.
2. Gupta S.C, and KapurV.K “Fundamentals of Applied Statistics”, Sultan Chand, New Delhi, 4th Edition, 2014.
3. Michael J. Crawley, “The R Book”, Wiley, 3rd Edition,2020.

Online Resources// Web Links

1. Introduction to Probability and Statistics Using R:
2. https://www.atmos.albany.edu/facstaff/timm/ATM315spring14/R/IPSUR.pdf

Assessment

Formative	Summative
Assignments / PBA, SBA, Worksheet, Quiz, Lab	CAT- I, CAT – II and End Semester Examination (ESE)

Course Curated By

Expert(s) from Industry	Expert(s) from Higher Education Institutions	Internal Expert(s)
1. Dr. R VASU Business Excellence and Management Systems Consultant Specialisation in Process Excellence, Six Sigma Quality, Health Safety & Environment Systems Vice President(Retired) Brakes India.	1. Dr. M. Sivakumar Assistant Professor Sr. Grade Vellore Institute of Technology, Vellore 2. Dr. Ramesh Babu Assistant Professor (SG) Amrita University Coimbatore, Tamil Nadu.	1. Dr. R.Marudhachalam Associate Professor, Department of Mathematics, KCT

Recommended by BoS on	**07-05-2025**		
Academic Council Approval	**28**	**Date**	**26/062025**

24FTP202	PATTERN DRAFTING LABORATORY	L	T	P	J	C
		0	0	2	0	1
PC		SDG	9, 12, 13			

Pre-requisite courses	-	Data Book / Code book (If any)	-

Course Objectives:	
The purpose of taking this course is to:	
1	familiarize students with flat pattern drafting techniques
2	enable students to adapt and manipulate basic pattern blocks
3	equip the student with draping foundation skills

Course Outcomes		
After successful completion of this course, the students shall be able to		Revised Bloom's Taxonomy Levels (RBT)
CO 1	Apply the principles of pattern making to draft basic block patterns.	Ap
CO 2	Resolve the pattern ease and allowances with reference to the fabric attributes	An
CO 3	Conclude the design ease and stitching specifications.	An

Course Outcomes (CO)	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	3	3	-	2	-	-	2	3	-	-	2	3	-
2	3	3	3	-	2	-	-	2	3	-	-	2	3	3
3	3	3	-	2	2	-	-	2	3	-	-	-	3	3

LIST OF EXPERIMENTS	
1. Draw the different parts of a Top garment and a bottom garment in two point perspective.	**3 Hours**
2. Draft a sleeve pattern block by flat pattern method and mark pattern details.	**3 Hours**
3. Draft a basic block pattern of woman's bodice by flat pattern method and mark pattern details.	**3 Hours**
4. Draft a basic block pattern of skirt by flat pattern method and mark pattern details.	**3 Hours**
5. Adapt the basic bodice block to a style block applying manipulation techniques and interpreting the ease requirements.	**3 Hours**

6. Construct a basic block pattern of trouser by flat pattern method and mark pattern details.	**3 Hours**
7. Explore the principles of draping a wrap skirt with knife pleats using poplin fabric	**3 Hours**
8. Explore the principles of draping a bodice block using poplin fabric	**3 Hours**
9. Grade the given style block in two different sizes applying the grading rules	**3 Hours**
10. Prepare a marking plan for five pieces basic pattern set on the given fabric.	**3 Hours**

Theory Hours:	**0**	**Tutorial Hours:**	**0**	**Practical Hours:**	**30**	**Project Hours:**	**0**	**Total Hours:**	**30**

Learning Resources

Textbooks:

Nil

References:

1. Jo Barnfield and Andrew Richards, The Essential Guide to Pattern Making: All You Need to Know About Designing, Adapting and Customizing Sewing Patterns, Search press Ltd, (2024)
2. Gina Renee Dunham, The fitting book, Gina Renee Designs, (2021).

Online Resources (Weblinks)

1. https://www.universityoffashion.com
2. https://sewing.patternreview.com/

Assessment (Practical course)

Lab Workbook, Experimental Cycle tests, viva-voce,

Course Curated by

Expert(s) from Industry	Expert(s) from Higher Education Institution	Internal Expert(s)
Mrs. Shreelekha, Head of marketing, Maybell India, Chennai.	Mr. Bhoomaiah Bandi, Senior Associate Designer, National institute of Design, Andhrapradesh.	Dr.V.Nithyaprakash, Associate Professor Dept of Fashion Technology

Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	26/06/2025

24FTT203	CONCEPTS OF FASHION FORMULATION	L	T	P	J	C
		3	0	0	0	3
PC		SDG	9, 12, 13			

Pre-requisite courses	24FTI101	Data Book / Code book (If any)	--

Course Objectives:	
The purpose of taking this course is to:	
1	Enable the student to spot and choose appropriate color palettes according to the theme.
2	Equip the student about the knowledge of subcultures and trends
3	Enable the student to use forecasting techniques to identify the new trends
4	Enable the student to apply research techniques for design concept formulation
5	Enable the student compare traditional and modern Indian ethnic clothing styles and draw inferences

Course Outcomes:	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Levels (RBT)
CO1	Apply the knowledge of advanced color concepts to understand and implement different color models and systems in fashion.	Ap
CO2	Illustrate the role of various fashion subcultures and identify their impact on contemporary fashion trends.	Ap
CO3	Infer the role of fashion forecasting methods and predict macro and micro trends in the industry.	Ap
CO4	Apply research techniques, design process, and creative techniques to develop fashion concepts.	Ap
CO5	Compare traditional and modern Indian ethnic clothing styles and their cultural influences.	Ap

	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
Course Outcomes (CO)	1 Engineering Knowledge	2 Problem Analysis	3 Design/Development of Solutions	4 Conduct Investigations of Complex Problems	5 Engineering Tool Usage	6 The Engineer and The World	7 Ethics	8 Individual and Collaborative teamwork	9 Communication	10 Project Management and Finance	11 Life-Long Learning	PSO-1	PSO-2	PSO- 3
1	3	3	2	-	-	3	2	-	-	-	3	3	-	3
2	3	2	-	-	-	-	-	-	-	-	2	-	3	-

3	3	3	3	-	2	3	2	-	-	-	2	-	3	3
4	3	3	2	-	3	3	2	-	-	-	3	3	-	3
5	3	3	-	-	3	-	2	-	-	-	3	2	2	2

Course Content

ADVANCED COLOUR CONCEPTS Pantone. Color wheels: From traditional to digital. Color Palettes – Pastel palettes, Neon primaries, Industrial greys. Bohemian Blues. Color proportions and balance in collections and runway shows. The role of neutral colors and monochromatic schemes in fashion design. Hues, Sustainable and Natural tones, Retro tones, Warm pinks, Pop Art	**9 Hours**
FASHION FUNDAMENTALS Fashion - Definition, Fashion adoption theories. Fashion life cycle, Fashion terminology -Street fashion, Recurring fashion, Mass fashion, Style, Chic, Boutique, Haute Couture. Subcultures – Japanese style tribes, K-pop, Mod fashion, Bohemian, Punk, Goth, Hippies, Hip-Hop, Skater, Emo, Rave, Preppy, Teddy Boy.	**9 Hours**
FASHION FORECASTING PROCESS Fashion Forecasting – the role of forecasting agencies and websites. Websites: trends.google.com, trends.pinterest.com, wgsn.com, fashionsnoops.com, mintel.com, voguebusiness.com, fashionrevolution.org, lyst.com. Fashion forecasting types – long-term, short-term, long-term forecasting methodology – PESTEL factors, brain reserve methodology. Short-term forecasting methodology – Delphi, time service-based, scenario writing, subjective approach.	**9 Hours**
FASHION DESIGN PROCESS Factors influencing fashion in India - Festivals, economic factors, regional influences, Filmy culture, technological advancements, social movements, and youth culture. Design process – Analyze the brief, Research inspiration, Research direction, Creative process, and Prototype processes – digital, physical, evaluation criteria, and promotion strategies.	**9 Hours**
INDIAN ETHNIC CLOTHING Indian fusion styles - Anarkali-style gowns, fusion sari, Dhoti pants/brocade trouser – western tops, Kurtha – trouser/palazzo, Churidar – long jackets/jodhpuri jacket. Traditional Textile craft – Dacca Muslin, Bandhani, Ikkat, Block printed and Kalamkari. Indian fashion designers and their adoption of traditional textile craft.	**9 Hours**

Theory	Tutorial	Practical	Project	Total
Hours: 45	**Hours: 0**	**Hours: 0**	**Hours:0**	**Hours:45**

Learning Resources

Textbooks:

1. Kathryn McKelvey and Janine Munslow, “Fashion Design: Process, Innovation and Practice”, Blackwell Publishing, USA, 2005.
2. Diane.T and Cassidy. T, “Colour forecasting” Blackwell Publishing, 2005

References:

1. Fiona Dieffenbacher, Fashion Thinking Creative Approaches to the Design Process, Bloomsbury Publishing, 2020.
2. Steven Faerm, Fashion Design Course: Principles, Practice, and Techniques: The Practical Guide for Aspiring Fashion Designers, Sourcebooks, 2017.
3. Kathryn McKelvey and Janine Munslow, “Fashion Design: Process, Innovation and Practice”, Blackwell Publishing, USA, 2005.
4. Diane.T and Cassidy. T, “Colour forecasting” Blackwell Publishing, 2005
5. Jenny Davis “A Complete Guide to Fashion Designing” Abhishek Publications, Chandigarh, India 2008.
6. by Fashionary Fashionpedia January 2016.
7. Myles Ethan Lascity, “Communicating Fashion: Clothing, Culture, and Media”, Publisher: Bloomsbury Visual Arts, 2021.
8. Anneke Smelik, Agnès Rocamora “Thinking Through Fashion: A Guide to Key Theorists (Dress Cultures)” Published by Bloomsbury Visual Arts in 2019.

9. Chelsea Rousso, Nancy Kaplan Ostroff, “Fashion Forward: A Guide to Fashion Forecasting,” published by Fairchild Books in 2024. USA
10. Jay Diamond, Ellen Diamond: The World of Fashion, published by Fairchild Books in 2013. USA.

Online Educational Resources:

1. https://audaces.com/en/blog/pattern-making https://forums.thefashionspot.com/
2. https://www.universityoffashion.com/

Assessment (Theory course)
SA, Activity and Learning Task(s)*, Mini project, MCQ, End Semester Examination (ESE)

Course Curated by			
Expert(s) from Industry	**Expert(s) from Higher Education Institution**		**Internal Expert(s)**
Mr. Santhosh Raman Managing Partner 5ifty2 Sourcing and Manufacturing Company, Tirupur.	Dr. Bhanu Rekha, Professor & Head, Fashion Designing, SRM Institute of Technology, Chennai.		Dr. Nithyaprakash. V Associate professor, Department of Fashion technology, Kumaraguru College of Technology S.Chandrakumar, Assistant Professor (Sr.G), Department of Fashion Technology, Kumaraguru College of Technology
Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	26/06/2025

24FTP204 PC	FASHION ILLUSTRATION LABORATORY	L	T	P	J	C
		0	0	2	0	1
		SDG	9, 12, 13			

Pre-requisite courses	24FTI101	Data Book / Code book (If any)	-

Course Objectives:	
The purpose of taking this course is to:	
1	Enable the students to integrate motif and textile combinations creatively in fashion compositions.
2	Enable the students to develop proficiency in figure drawing and fashion illustration.
3	Enable the students to master fabric and texture rendering techniques to accurately depict various textiles, prints, and patterns on illustrated garments.
4	Enable the students to apply the knowledge of colour theory and mixed media techniques to fashion illustrations.
5	Enable the students to create a personal fashion illustration portfolio

Course Outcomes		
After successful completion of this course, the students shall be able to		Revised Bloom's Taxonomy Levels (RBT)
CO 1	Apply advanced fashion illustration techniques to demonstrate detailed rendering of garment textures and fabric types.	Ap
CO 2	To develop skills in illustrating fashion figures in various poses that showcase garment movement.	Ap
CO 3	Analyse and evaluate different garment silhouettes to assess their design appeal and technical accuracy for fashion collections.	An

Course Outcomes (CO)	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	3	3	-	-	2	-	3	3	-	3	2	3	3
2	3	2	3	-	-	2	-	3	3	-	3	2	3	-
3	3	3	3	-	-	2	-	3	3	-	3	2	3	3

	LIST OF EXPERIMENTS	
1	Motif and textile combination with suitable colour rendering.	**3 Hours**
2	Advanced figure drawing – Developing different poses and gestures.	**3 Hours**
3	Rendering fabrics and textures – detailed fabric illustration techniques.	**3 Hours**
4	Rendering prints – illustrating patterns and prints on garments.	**3 Hours**
5	Fashion illustration – exploring silhouette on fashion figure.	**3 Hours**
6	Rendering accessories in fashion illustration.	**3 Hours**
7	Rendering hairstyles in fashion illustration.	**2 Hours**
8	Fashion illustration for technical drawings – Flats and specification of a Silhouette.	**3 Hours**
9	Creating fashion illustrations based on themes and inspiration to create a personal fashion portfolio.	**4 Hours**
10	Fashion illustration with mixed media. Illustrating different garment styles – casual wear	**3 Hours**

Theory Hours: 0	**Tutorial Hours: 0**	**Practical Hours: 30**	**Project Hours: 0**	**Total Hours: 30**

Learning Resources

Textbooks:

Nil

References:

1. Kathryn McKelvey and Janine Munslow, “Fashion Design: Process, Innovation and Practice”, Blackwell Publishing, USA, 2005.

2. Anna Kiper, “Fashion Illustration: Inspiration and Technique,” A David Charles book, F&W Media International Ltd, USA. 2011.

Online Resources (Weblinks)

1. https://www.wgsn.com/en/products/fashion
2. https://www.futuresnoops.com/en

Assessment (Practical course)

Lab Workbook, Experimental Cycle tests, viva-voce,

Course Curated by

Expert(s) from Industry	Expert(s) from Higher Education Institution	Internal Expert(s)

Mr. Santhosh Raman Managing Partner 5ifty2 Sourcing and Manufacturing Company, Tirupur.	Dr. Bhanu Rekha, Professor & Head, Fashion Designing, SRM Institute of Technology, Chennai.		Dr.Nithyaprakash. V Associate Prof & Chandrakumar. S. Asst Prof (Sr.G) Dept of Fashion Technology
Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	26/06/2025

24FTT205	YARN AND FABRIC MANUFACTURING	L	T	P	J	C
		3	0	0	0	3
PC		SDG		8, 9,12		

Pre-requisite courses	24FTI102	Data Book / Codebook (If any)	--

Course Objectives:	
The purpose of taking this course is to:	
1	Impart knowledge on the fundamental principles, objectives, and operational processes of conventional and advanced spinning systems used in yarn manufacturing.
2	Enable understanding of post-spinning processes such as yarn winding, doubling, and sewing thread production, including the identification and correction of common yarn faults
3	Introduce students to the classification, structure, and applications of specialty yarns including fancy, textured, mélange, ply, and metallic yarns
4	Familiarize students with preparatory weaving processes such as winding, warping, and sizing, and to explain the functional aspects of associated machinery and tools.
5	Provide insights into modern weaving technologies, including shuttle and shuttle-less systems, and highlight recent advancements in braiding technology

Course Outcomes	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Level
CO1	Brief the objectives, principles, and sequential processes involved in conventional and advanced spinning systems, including rotor, air-jet, compact, and DREF spinning	U
CO2	Identify and evaluate post-spinning operations like yarn winding, doubling, and sewing thread manufacturing, and analyze common yarn faults and their rectification methods	Ap
CO3	Classify and describe specialty yarns such as fancy, textured, mélange, and metallic yarns based on manufacturing methods, properties, and applications	Ap
CO4	Demonstrate an understanding of preparatory weaving processes (winding, warping, sizing), and explain the functions of related machines and yarn quality standards.	Ap
CO5	Compare and assess the technologies used in shuttle and shuttle-less weaving and braiding technology systems	Ap

Course Outcomes (CO)	1	2	3	4	5	6	7	8	9	10	11	Program Specific Outcomes (PSO)		
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO - 3
1	3	2	3	2	3							3	3	
2	3	2		2	3							3	3	
3	3		2		3							3	3	
4	3	2	2	2	3							3	3	
5	3		2		3							3	3	

Course Content

SHORT STAPLE SPINNING SYSYTEM **Conventional Spinning System:** Objectives, Principles, Process - Ginning, Blow Room, Carding, Drawing, Combing, Simplex, Ring Spinning. **Advanced Spinning System:** Objectives, Principles, Process - Rotor, Air Jet, DREF and Compact Spinning. Comparison of yarn characteristics, application, properties, and end use from different spinning systems.	**9 Hours**
POST SPINNING AND SPECIALTY YARN MANUFACTURING **Post Spinning**: Yarn winding and doubling - objectives, yarn faults, their identification, and characteristics. Objectives, principles of Ring Doubler and Two-for-One Twister (TFO). **Sewing Threads**: Sewing thread manufacturing – Fibres, yarn quality requirements, package types, ticket number. Sequence of processes in cotton, polyester, and polyester/cotton sewing threads. **Specialty Yarns**: Ply yarns, Fancy Yarns, Textured Yarns, Mélange Yarns, and metallic yarns - Principles, properties, manufacturing, types, and applications.	**9 Hours**
PREPARATORY FOR WEAVING **Winding:** Objectives, Principles, Process; Cheese, Cone, and Pirn winding. yarn clearers – optical, and electronic clearers; knotters and splicers. Yarn quality requirements for weaving. **Warping and Sizing:** Objectives, Principles, Process - Beam and sectional warping machines. Types of creels. Objectives of sizing; Working principles of multi cylinder, single end sizing machines. Size ingredients, Size preparation.	**9 Hours**
SHUTTLE WEAVING **Shuttle Weaving:** Objectives and Working Principles – Primary, secondary, and auxiliary motions. Mechanisms of Tappet, Dobby, and Jacquard weaving. Types of Shuttle looms – Handloom, Non-automatic, Semi-automatic, Automatic, Drop Box, and Terry Looms.	**9 Hours**
SHUTTLELESS WEAVING AND BRAIDING **Shuttle less Weaving:** Objectives, working principles of Projectile, Rapier, Air-jet, Waterjet, Multiphase and circular weaving. Braiding – working principles, process, applications	**9 Hours**

Theory Hours: 45	Tutorial Hours: 0	Practical Hours: 0	Project Hours: 0	Total Hours: 45

Learning Resources

Textbooks:

1. **Corbman, B. A.** (2014). *Textiles: Fiber to fabric* (11th ed.). McGraw-Hill Education.

References:

1. Klein, W. (2016). The technology of short-staple spinning (2nd ed.). The Textile Institute.
2. Lord, P. R., & Mohamed, M. H. (1992). Weaving: Conversion of yarn to fabric. Merrow Publishing.
3. Rengasamy, R. S. (2014). Spinning: Drawing, combing, roving, and ring spinning. Woodhead Publishing India.
4. Lawrence, C. A. (2010). Fundamentals of spinning yarn: Textile fibres to yarns. CRC Press.
5. Chattopadhyay, R. (2004). Advances in technology of yarn production. NCUTE Publication.
6. Talukdar, M. K., Sriramulu, P. K., & Ajgaonkar, D. B. (1998). Weaving: Machines, mechanisms, management. The Textile Institute.
7. Adanur, S. (2001). Handbook of weaving. CRC Press.
8. Ishtiaque, S. M., & Chattopadhyay, R. (2005). Mechanics of weaving machines. NCUTE Publication.
9. Ormerod, A., & Sondhelm, W. S. (1995). Weaving: Technology and operations. The Textile Institute.
10. Lord, P. R. (2003). Introduction to weaving technology. The Textile Institute.

Online Educational Resources:

1.NPTEL:: Textile Engineering - NOC: Yarn manufactures I: Principle of Carding and Drawing
2. NPTEL :: Textile Engineering - Yarn Manufacture - II
3. NPTEL :: Textile Engineering - Fabric Manufacture - I

Assessment (Theory course)

SA, Activity and Learning Task(s)*, Mini project, MCQ, End Semester Examination (ESE)

Course Curated by

Expert(s) from Industry	Expert(s) from Higher Education Institution	Internal Expert(s)
Mr.Aniruth.V Executive Director Hayagreevas Fabrics Pvt ltd Coimbatore 641002	Dr.Rathinamoorthy R Associate Professor Fashion Technology Vellore Institute of Technology, Chennai	Dr. Rajkumar. G Mr. A. Thambidurai, Dept of Fashion Technology

Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	26/06/2025

24FTT206	SEWING TECHNIQUES AND APPAREL DESIGN	L	T	P	J	C
		3	0	0	0	3
PC		SDG	4, 9			

Pre-requisite courses	--	Data Book / Code book (If any)	--

Course Objectives:	
The purpose of taking this course is to:	
1	Enable the student to understand and apply the principles of seam and stitch selection, recognizing different threads, machines seam types and finishes.
2	Equip the student to comprehend and implement various fullness techniques such as darts, tucks, pleats, gathers, hemming and neckline finishes to improve garment design, fit, and durability.
3	Identify and differentiate between various sleeve and yoke types to achieve the desired aesthetic appeal and functionality in garment construction.
4	Learn and distinguish various collar and pocket types and select the most suitable designs to enhance both aesthetics and functionality in garments.
5	Equip the student to gain proficiency in recognizing various placket and fastener types to ensure the achievement of the desired garment aesthetics, functionality, and ease of use.

Course Outcomes:	After successful completion of this course, the students shall be able to	Bloom's Taxonomy Levels (RBT)
CO 1	Apply the knowledge of seams and stitch classes to select appropriate seam and stitch types, seam finishes, and address seam and stitch defects in garment fabrication.	Ap
CO 2	Illustrate types of fullness darts, tucks, pleats, and gathers to enhance design and fit, and choose suitable hemming and neckline finishes for durability.	Ap
CO 3	Distinguish among various sleeves and yokes to achieve desired garment aesthetics and functionality.	An
CO 4	Distinguish between various collars and pockets to achieve desired garment aesthetics and functionality.	An
CO 5	Recognize among various plackets and fasteners to accomplish the desired garment aesthetics and functionality.	Ap

Course Outcomes (CO)	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)										Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and Collaborative Team work	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	-	-	-	3	-	-	-	2	-	2	2	-	-

2	3	3	3	-	-	3	-	-	-	-	2	3	2	2
3	3	3	2	3	2	-	-	-	-	-	2	3	-	2
4	3	3	3	-	2	3	-	-	-	-	2	3	2	2
5	3	-	3	3	-	2	-	-	-	-	2	3	2	2

Course Content

SEWING THREADS AND MACHINE COMPONENTS: Definition, types of sewing threads and machine types, parts and functions **SEAMS:** Definition, Types of seams – Federal classifications, factors to be considered in the selection of seam, seam finishes and seam defects. **STITCHES:** Definition, Stitch Types - Federal classifications, stitch parameters, Stitching defects.	**11 Hours**
FULLNESS: Definition, types- Darts – single, double pointed darts, Tucks - pin tucks, cross tucks, piped tucks, shell tucks. Pleats- knife, box, pinch , Flares, godets, gathers, shirring, frills and smocking. **HEMMING TECHNIQUES:** Definition, types - machine stitched hem and hand-stitched hem. **NECKLINE FINISHES**- Bias strip, bias facing, bias binding, fitted facing and French binding	**9 Hours**
SLEEVES: Types and construction of sleeves - plain, puffs, gathered, bell, bishop, circular, leg-o-mutton, Kimono and Raglan sleeves **YOKES:** Types and construction of yoke - Simple yoke – yokes with or without fullness, midriff yokes, panel yokes, partial yokes.	**9Hours**
COLLARS: Classification of collars, Types of collars–peter pan, scalloped, flared, puritan collar, sailor collar, shirt collar with stand, Mandarin collar, shawl collar. **POCKETS:** Types– patch pocket -set in pocket- bound pocket, welt pocket, pocket in a seam- front hip pocket, Attaching flap to a patch pocket.	**9 Hours**
PLACKETS: Inconspicuous plackets - continuous bound placket, two-piece placket, zipper placket – slot seam & lapped seam. Conspicuous plackets - Tailored or Kurtha placket, fly opening – button and buttonhole method, Zipper method **FASTENERS:** Types - button and buttonholes, hooks and eye, snaps, velcro, eyelets, cords , rivets laces and Ric-Rac.	**7 Hours**

Theory Hours:45	Tutorial Hours: 0	Practical Hours:0	Project Hours:0	Total Hours:45

Learning Resources

Textbooks:

1. Jefferys, Chris,The complete book of sewing, London : Dorling Kindersley, 2006

References:

1. Alison Smith, Dressmaking- The complete step-by-step guide to making your own clothes,Dorling Kindersley Limited Publisher,2012
2. Ruth E.Glock, Grace I. Kunz, “Apparel Manufacturing – Sewn Product Analysis”, Pearson/Prentice Hall, 2005
3. Amaden. C. and Crawford, A guide to Fashion Sewing, Fairchild Publications, 2001.
4. Joseph. H andAmstrong, “Pattern Making for Fashion Design”, Pearson Education Inc, 2005.
5. Sumathi,G.J, “ Elements of Fashion and Apparel Design”, New Age International (P) Ltd, 2005.
6. Claire Shaeffer, “Sewing for the Apparel Industry”, Prentice-Hall Inc, New Jersey, 2001
7. Gerry Cooklin, “Garment Technology for Fashion Designers”, Blackwell Science Ltd., 2001.

Online Educational Resources:

1. https://sew4home.com/wp-content/uploads/2011/12/0963-Sewing_Basics_Resource_Guide.pdf
2. https://ncert.nic.in/vocational/pdf/ivsm103.pdf

Assessment (Theory course)
SA, Activity and Learning Task(s)* , Mini project, MCQ, End Semester Examination (ESE)

Course Curated by			
Expert(s) from Industry	**Expert(s) from Higher Education Institution**	**Internal Expert(s)**	
P.Senthil Shri Subam Tex Thirumurugan Poondi Tiruppur - 641652	Dr.Rathinamoorthy R Associate Professor Fashion Technology Vellore Institute of Technology, Chennai	Dr.V.Krishnaveni Associate Professor, Department of Fashion Technology, Kumaraguru College of Technology	
Recommended by BoS on	07/05/2025		
Academic Council Approval	28	**Date**	26/06/2025

24FTP207	GARMENT COMPONENTS LABORATORY	L	T	P	J	C
		0	0	2	0	1
PC		SDG	4, 9, 12			

Pre-requisite courses	-	Data Book / Code book (If any)	-

Course Objectives:	
The purpose of taking this course is to:	
1	Familiarize students with the functioning and adjustments of sewing machines including stitch length and width settings for various fabric types and sewing operations.
2	Enable students to develop proficiency in constructing garment components such as seams, darts, tucks, gathers, frills, necklines, sleeves, collars, pockets, plackets, and fasteners.
3	Impart hands-on skills required for precision and finishing in assembling basic garment elements using appropriate techniques and tools.

Course Outcomes		
After successful completion of this course, the students shall be able to		Revised Bloom's Taxonomy Levels (RBT)
CO 1	Understand and apply various machine settings to control stitch length and width for producing samples with different seam types and stitches.	Ap
CO 2	Demonstrate the construction of garment components such as fullness treatments (darts, tucks, pleats, gathers, flares, frills), necklines, sleeves, and collars using appropriate sewing techniques.	An
CO 3	Assemble and finish garment details including pockets, plackets, and fasteners with precision, ensuring both functionality and aesthetic appeal.	Ev

Course Outcomes (CO)	Program Outcomes (PO) (Strong-3, Medium – 2, Weak-1)											Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11			
	Engineering Knowledge	Problem Analysis	Design/Development of Solutions	Conduct Investigations of Complex Problems	Engineering Tool Usage	The Engineer and The World	Ethics	Individual and	Communication	Project Management and Finance	Life-Long Learning	PSO-1	PSO-2	PSO-3
1	3	2	2	-	3	2	-	-	2	-	3	3	2	-
2	2	3	3	2	2	-	-	2	2	-	2	3	3	3
3	2	2	3	-	3	-	-	-	3	2	2	3	3	3

LIST OF EXPERIMENTS	
1. Preparing samples for different stitch length & width adjustments in sewing machines	2 **Hours**
2. Preparing samples for seams and stitches – Pain, top stitch, lapped, French seams , piped and even basting, uneven basting , back, overcasting stitches.	**4 Hours**
3. Preparing samples for Fullness - Darts, Tucks, Pleats, Gathers	4 **Hours**
4. Preparing samples for Fullness - Flares, Godets Frills, Ruffles	2 **Hours**
5. Preparing samples for Necklines – Bias facing, Bias Binding and Fitted facing	2 **Hours**
6. Preparing samples for Sleeves – Plain, Puff, Bell, Raglan	**3 Hours**
7. Preparing samples for collars – Peter Pan Collar, Full Shirt Collar, Mandrin Collar	4 **Hours**
8. Preparing samples for pockets – Patch Pocket, Bound Pocket and Front Hip Pocket	**3 Hours**
9. Preparing samples for plackets – Continuous Bound Placket, Two Piece Placket, Tailors Placket	**3 Hours**
10. Preparing samples for fasteners -Button and Buttonhole, Zipper, Velcro	**3 Hours**

Theory Hours: 0	**Tutorial Hours: 0**	**Practical Hours: 30**	**Project Hours: 0**	**Total Hours: 30**

Learning Resources
Textbooks:
Nil
References:
1. Shaeffer, C. (2011). The Complete Book of Sewing Techniques. Sterling Publishing 2. Aldrich, W. (2008). Metric Pattern Cutting for Women's Wear (5th ed.). Wiley-Blackwell.

Online Resources (Weblinks)
1. https://www.sewguide.com/ 2. https://www.patternmakingschool.com/

Assessment (Practical course)
Lab Workbook, Experimental Cycle tests, viva-voce.

Course Curated by			
Expert(s) from Industry	**Expert(s) from Higher Education Institution**	**Internal Expert(s)**	
P.Senthil Shri Subam Tex Thirumurugan Poondi Tiruppur - 641652	Dr.Rathinamoorthy R Associate Professor Fashion Technology Vellore Institute of Technology, Chennai	Dr.V.Krishnaveni, Associate Professor, Department of Fashion Technology, Kumaraguru College of Technology	
Recommended by BoS on	07/05/2025		
Academic Council Approval	28	Date	26/06/2025