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| B.Sc.,  FASHION TECHNOLOGY & COSTUME designing |
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| |  | | --- | | **SYLLABUS** | | **from the academic year**  **2023-2024** | |
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| **TAMILNADU STATE COUNCIL FOR HIGHER EDUCATION, CHENNAI – 600 005** |
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| **LEARNING OUTCOMES-BASED CURRICULUM FRAMEWORK GUIDELINES BASED REGULATIONS FOR UNDER GRADUATE PROGRAMME** | |
| **Programme:** | **B.Sc. FASHION TECHNOLOGY & COSTUME DESIGNING** |
| **Programme Code:** |  |
| **Duration:** | **3 Years (UG)** |
| **Programme Outcomes:** | **PO1: Disciplinary knowledge:** Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate Programme of study  **PO2: Communication Skills:** Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one’s views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.  **PO3: Critical thinking:** Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.  **PO4: Problem solving: Capacity** to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge; and apply one’s learning to real life situations.  **PO5: Analytical reasoning**: Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.  **PO6: Research-related skills**: A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating; Ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation  **PO7: Cooperation/Team work:** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team  **PO8: Scientific reasoning**: Ability to analyse, interpret and draw conclusions from quantitative/qualitative data; and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.  **PO9: Reflective thinking**: Critical sensibility to lived experiences, with self awareness and reflexivity of both self and society.  **PO10 Information/digital literacy:** Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources; and use appropriate software for analysis of data.  **PO 11 Self-directed learning**: Ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.  **PO 12 Multicultural competence:** Possess knowledge of the values and beliefs of multiple cultures and a global perspective; and capability to effectively engage in a multicultural society and interact respectfully with diverse groups.  **PO 13: Moral and ethical awareness/reasoning**: Ability toembrace moral/ethical values in conducting one’s life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstratingthe ability to identify ethical issues related to one‟s work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.  **PO 14: Leadership readiness/qualities:** Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.  **PO 15: Lifelong learning:** Ability to acquire knowledge and skills, including „learning how to learn‟, that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling. |
| **Programme Specific Outcomes:** | On successful completion of Bachelor of Physics with Computer Applications programme, the student should be able to:  **PSO1: Disciplinary Knowledge:** Understand the fundamental principles, concepts, and theories related to physics and computer science. Also, exhibit proficiency in performing experiments in the laboratory.  **PSO2: Critical Thinking:** Analyse complex problems, evaluate information, synthesize information, apply theoretical concepts to practical situations, identify assumptions and biases, make informed decisions and communicate effectively  **PSO3: Problem Solving:** Employ theoretical concepts and critical reasoning ability with physical, mathematical and technical skills to solve problems, acquire data, analyze their physical significance and explore new design possibilities.  **PSO4: Analytical & Scientific Reasoning:** Apply scientific methods, collect and analyse data, test hypotheses, evaluate evidence, apply statistical techniques and use computational models.  **PSO5: Research related skills:** Formulate research questions, conduct literature reviews, design and execute research studies, communicate research findings and collaborate in research projects.  **PSO6: Self-directed & Lifelong Learning:** Set learning goals, manage their own learning, reflect on their learning, adapt to new contexts, seek out new knowledge, collaborate with others and to continuously improve their skills and knowledge, through ongoing learning and professional development, and contribute to the growth and development of their field. |

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| **PO/PSO** | **PSO1** | **PSO2** | **PSO3** | **PSO4** | **PSO5** | **PSO6** |
| **PO1** |  |  |  |  |  |  |
| **PO2** |  |  |  |  |  |  |
| **PO3** |  |  |  |  |  |  |
| **PO4** |  |  |  |  |  |  |
| **PO5** |  |  |  |  |  |  |
| **PO6** |  |  |  |  |  |  |

**2. Highlights of the Revamped Curriculum**:

* Student-centric, meeting the demands of industry & society, incorporating industrial components, hands-on training, skill enhancement modules, industrial project, project with viva-voce, exposure to entrepreneurial skills, training for competitive examinations, sustaining the quality of the core components and incorporating application oriented content wherever required.
* The Core subjects include latest developments in the education and scientific front, advanced programming packages allied with the discipline topics, practical training, devising statistical models and algorithms for providing solutions to industry / real life situations. The curriculum also facilitates peer learning with advanced statistical topics in the final semester, catering to the needs of stakeholders with research aptitude.
* The General Studies and Statistics based problem solving skills are included as mandatory components in the ‘Training for Competitive Examinations’ course at the final semester, a first of its kind.
* The curriculum is designed so as to strengthen the Industry-Academia interface and provide more job opportunities for the students.
* The Statistical Quality Control course is included to expose the students to real life problems and train the students on designing a mathematical model to provide solutions to the industrial problems.
* The Internship during the second year vacation will help the students gain valuable work experience, that connects classroom knowledge to real world experience and to narrow down and focus on the career path.
* Project with viva-voce component in the fifth semester enables the student, application of conceptual knowledge to practical situations. The state of art technologies in conducting a Explain in a scientific and systematic way and arriving at a precise solution is ensured. Such innovative provisions of the industrial training, project and internships will give students an edge over the counterparts in the job market.
* State-of Art techniques from the streams of multi-disciplinary, cross disciplinary and inter disciplinary nature are incorporated as Elective courses, covering conventional topics to the latest DBMS and Computer software for Analytics.

**Value additions in the Revamped Curriculum:**

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| Semester | Newly introduced Components | Outcome / Benefits |
| I | **Foundation Course**  To ease the transition of learning from higher secondary to higher education, providing an overview of the pedagogy of learning abstract Statistics and simulating mathematical concepts to real world. | * Instil confidence among students * Create interest for the subject |
| I, II, III, IV | **Skill Enhancement papers** (Discipline centric / Generic / Entrepreneurial) | * Industry ready graduates * Skilled human resource * Students are equipped with essential skills to make them employable |
| * Training on Computing / Computational skills enable the students gain knowledge and exposure on latest computational aspects |
| * Data analytical skills will enable students gain internships, apprenticeships, field work involving data collection, compilation, analysis etc. |
| * Entrepreneurial skill training will provide an opportunity for independent livelihood * Generates self – employment * Create small scale entrepreneurs * Training to girls leads to women empowerment |
| * Discipline centric skill will improve the Technical knowhow of solving real life problems using ICT tools |
| III, IV, V & VI | Elective papers-  An open choice of topics categorized under Generic and Discipline Centric | * Strengthening the domain knowledge * Introducing the stakeholders to the State-of Art techniques from the streams of multi-disciplinary, cross disciplinary and inter disciplinary nature * Students are exposed to Latest topics on Computer Science / IT, that require strong statistical background * Emerging topics in higher education / industry / communication network / health sector etc. are introduced with hands-on-training, facilitates designing of statistical models in the respective sectors |
| IV | DBMS and Programming skill, Biostatistics, Statistical Quality Control, Official Statistics, Operations Research | * Exposure to industry moulds students into solution providers * Generates Industry ready graduates * Employment opportunities enhanced |
| II year Vacation activity | Internship / Industrial Training | * Practical training at the Industry/ Banking Sector / Private/ Public sector organizations / Educational institutions, enable the students gain professional experience and also become responsible citizens. |
| V Semester | Project with Viva – voce | * Self-learning is enhanced * Application of the concept to real situation is conceived resulting in tangible outcome |
| VI Semester | Introduction of  Professional Competency component | * Curriculum design accommodates all category of learners; ‘Statistics for Advanced Explain’ component will comprise of advanced topics in Statistics and allied fields, for those in the peer group / aspiring researchers; * ‘Training for Competitive Examinations’ –caters to the needs of the aspirants towards most sought - after services of the nation viz, UPSC, ISS, CDS, NDA, Banking Services, CAT, TNPSC group services, etc. |
| Extra Credits:  For Advanced Learners / Honors degree | | * To cater to the needs of peer learners / research aspirants |

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| **Skills acquired from the Courses** | Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill |

**Credit Distribution for UG Programmes**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sem I** | **Credit** | **H** | **Sem II** | **Credit** | **H** | **Sem III** | **Credit** | **H** | **Sem IV** | **Credit** | **H** | **Sem V** | **Credit** | **H** | **Sem VI** | **Credit** | **H** |
| Part 1. Language – Tamil | 3 | 6 | Part..1. Language – Tamil | 3 | 6 | Part..1. Language – Tamil | 3 | 6 | Part..1. Language – Tamil | 3 | 6 | 5.1 Core Course –\CC IX | 4 | 5 | 6.1 Core Course –  CC XIII | 4 | 6 |
| Part.2 English | 3 | 6 | Part..2 English | 3 | 6 | Part..2 English | 3 | 6 | Part..2 English | 3 | 6 | 5.2 Core Course – CC X | 4 | 5 | 6.2 Core Course –  CC XIV | 4 | 6 |
| 1.3 Core Course – CC I | 5 | 5 | 2..3 Core Course – CC III | 5 | 5 | 3.3 Core Course – CC V | 5 | 5 | 4.3 Core Course – CC VII  Core Industry Module | 5 | 5 | 5. 3.Core Course CC -XI | 4 | 5 | 6.3 Core Course –  CC XV | 4 | 6 |
| 1.4 Core Course – CC II | 5 | 5 | 2.4 Core Course – CC IV | 5 | 5 | 3.4 Core Course – CC VI | 5 | 5 | 4.4 Core Course –  CC VIII | 5 | 5 | 5. 4.Core Course –/ Project with viva- voce  CC -XII | 4 | 5 | 6.4 Elective -VII Generic/ Discipline Specific | 3 | 5 |
| 1.5 Elective I Generic/ Discipline Specific | 3 | 4 | 2.5 Elective II Generic/ Discipline Specific | 3 | 4 | 3.5 Elective III Generic/ Discipline Specific | 3 | 4 | 4.5 Elective IV Generic/ Discipline Specific | 3 | 3 | 5.5 Elective V Generic/ Discipline Specific | 3 | 4 | 6.5 Elective VIII  Generic/ Discipline Specific | 3 | 5 |
| 1.6 Skill Enhancement Course SEC-1 | 2 | 2 | 2.6 Skill Enhancement Course SEC-2 | 2 | 2 | 3.6 Skill Enhancement Course SEC-4,  (Entrepreneurial Skill) | 1 | 1 | 4.6 Skill Enhancement Course SEC-6 | 2 | 2 | 5.6 Elective VI Generic/ Discipline Specific | 3 | 4 | 6.6 Extension Activity | 1 | - |
| 1.7 Skill Enhancement -(Foundation Course) | 2 | 2 | 2.7 Skill Enhancement Course –SEC-3 | 2 | 2 | 3.7 Skill Enhancement Course SEC-5 | 2 | 2 | 4.7 Skill Enhancement Course SEC-7 | 2 | 2 | 5.7 Value Education | 2 | 2 | 6.7 Professional Competency Skill | 2 | 2 |
|  |  |  |  |  |  | 3.8 E.V.S. | - | 1 | 4.8 E.V.S | 2 | 1 | 5.8 Summer Internship /Industrial Training | 2 |  |  |  |  |
|  | **23** | **30** |  | **23** | **30** |  | **22** | **30** |  | **25** | **30** |  | **26** | **30** |  | **21** | **30** |
| **Total – 140 Credits** | | | | | | | | | | | | | | | | | |

**Choice Based Credit System (CBCS), Learning Outcomes Based Curriculum Framework (LOCF) Guideline Based Credit and Hours Distribution System**

**for all UG courses including Lab Hours**

**First Year – Semester-I**

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| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| Part-1 | Language – Tamil | 3 | 6 |
| Part-2 | English | 3 | 6 |
| Part-3 | Core Courses & Elective Courses [in Total] | 13 | 14 |
| Part-4 | Skill Enhancement Course SEC-1 | 2 | 2 |
| Foundation Course | 2 | 2 |
|  |  | **23** | **30** |

**Semester-II**

|  |  |  |  |
| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| Part-1 | Language – Tamil | 3 | 6 |
| Part-2 | English | 3 | 6 |
| Part-3 | Core Courses & Elective Courses including laboratory [in Total] | 13 | 14 |
| Part-4 | Skill Enhancement Course -SEC-2 | 2 | 2 |
| Skill Enhancement Course -SEC-3 (Discipline / Subject Specific) | 2 | 2 |
|  |  | **23** | **30** |

**Second Year – Semester-III**

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| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| Part-1 | Language - Tamil | 3 | 6 |
| Part-2 | English | 3 | 6 |
| Part-3 | Core Courses & Elective Courses including laboratory [in Total] | 13 | 14 |
| Part-4 | Skill Enhancement Course -SEC-4 (Entrepreneurial Based) | 1 | 1 |
| Skill Enhancement Course -SEC-5 (Discipline / Subject Specific) | 2 | 2 |
| E.V.S | - | 1 |
|  |  | **22** | **30** |

**Semester-IV**

|  |  |  |  |
| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| Part-1 | Language - Tamil | 3 | 6 |
| Part-2 | English | 3 | 6 |
| Part-3 | Core Courses & Elective Courses including laboratory [in Total] | 13 | 13 |
| Part-4 | Skill Enhancement Course -SEC-6 (Discipline / Subject Specific) | 2 | 2 |
| Skill Enhancement Course -SEC-7 (Discipline / Subject Specific) | 2 | 2 |
| E.V.S | 2 | 1 |
|  |  | **25** | **30** |

**Third Year**

**Semester-V**

|  |  |  |  |
| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| **Part-3** | Core Courses including Project / Elective Based | 22 | 26 |
| **Part-4** | Value Education | 2 | 2 |
| Internship / Industrial Visit / Field Visit | 2 | 2 |
|  |  | **26** | **30** |

**Semester-VI**

|  |  |  |  |
| --- | --- | --- | --- |
| **Part** | **List of Courses** | **Credit** | **No. of Hours** |
| **Part-3** | Core Courses including Project / Elective Based & LAB | 18 | 28 |
| **Part-4** | Extension Activity | 1 | - |
| Professional Competency Skill | 2 | 2 |
|  |  | **21** | **30** |

**Consolidated Semester wise and Component wise Credit distribution**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Parts** | **Sem I** | **Sem II** | **Sem III** | **Sem IV** | **Sem V** | **Sem VI** | **Total Credits** |
| **Part I** | 3 | 3 | 3 | 3 | - | - | 12 |
| **Part II** | 3 | 3 | 3 | 3 | - | - | 12 |
| **Part III** | 13 | 13 | 13 | 13 | 22 | 18 | 92 |
| **Part IV** | 4 | 4 | 3 | 6 | 4 | 1 | 22 |
| **Part V** | - | - | - | - | - | 2 | 2 |
| **Total** | 23 | 23 | 22 | 25 | 26 | 21 | **140** |

**\*Part I. II, and Part III components will be separately taken into account for CGPA calculation and classification for the under graduate programme and the other components. IV, V have to be completed during the duration of the programme as per the norms, to be eligible for obtaining the UG degree.**

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| **Methods of Evaluation** | | |
| **Internal Evaluation** | Continuous Internal Assessment Test | 25 Marks |
| Assignments |
| Seminars |
| Attendance and Class Participation |
| **External Evaluation** | End Semester Examination | 75 Marks |
|  | Total | 100 Marks |
| **Methods of Assessment** | | |
| **Recall (K1)** | Simple definitions, MCQ, Recall steps, Concept definitions | |
| **Understand/ Comprehend (K2)** | MCQ, True/False, Short essays, Concept explanations, Short summary or  overview | |
| **Application (K3)** | Suggest idea/concept with examples, Suggest formulae, Solve problems,  Observe, Explain | |
| **Analyze (K4)** | Problem-solving questions, Finish a procedure in many steps, Differentiate | |
|  | between various ideas, Map knowledge | |
| **Evaluate (K5)** | Longer essay/ Evaluation essay, Critique or justify with pros and cons | |
| **Create (K6)** | Check knowledge in specific or offbeat situations, Discussion, Debating or  Presentations | |

**B.Sc. Fashion Technology & Costume Designing Programme structure**

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| **Sem.** | **Part** | **Course Code** | **Title of the Papers** | **Cr.** | **Hrs./ Week** | **Max. Marks** | | |
| **Int.** | **Ext.** | **Total** |
| I | I | T | Language – Tamil | 3 | 6 | 25 | 75 | 100 |
| II | E | English | 3 | 6 | 25 | 75 | 100 |
| III | Core – I | Theory–I\_ Fashion Designing | 5 | 5 | 25 | 75 | 100 |
| Core – II | Practical–I- Fashion Designing Practical | 5 | 5 | 40 | 60 | 100 |
| Elective – I | Theory-IA – Fashion and Apparel  Designing | 3 | 4 | 25 | 75 | 100 |
| Elective – II | Practical-IA – Fashion and Apparel  Designing | 2 | 2 | 40 | 60 | 100 |
| IV | Skill Enhancement |  | 2 | 2 | 25 | 75 | 100 |
|  |  |  | Total | **23** | **30** | **205** | **495** | **700** |
| II | I | T/OL | Language – Tamil | 3 | 6 | 25 | 75 | 100 |
| II | E | English | 3 | 6 | 25 | 75 | 100 |
| III | Core – III | Theory–II – Textile Science | 5 | 5 | 25 | 75 | 100 |
| Core – IV | Practical-II – Basic sewing Techniques Lab | 5 | 5 | 40 | 60 | 100 |
| Elective – III | Theory– IB - Basic sewing Techniques | 3 | 4 | 25 | 75 | 100 |
| Skill Enhancement | Practical-IB- Basic sewing Techniques  Lab | 2 | 2 | 40 | 60 | 100 |
| IV | Skill Enhancement |  | 2 | 2 | 25 | 75 | 100 |
|  |  |  |  |  |  |  |  |
|  |  | Total | **23** | **30** | 205 | 495 | **700** |
| III | I | T/OL | Language – Tamil | 3 | 6 | 25 | 75 | 100 |
| II | E | English | 3 | 6 | 25 | 75 | 100 |
| III | Core – V | Theory-III – Basic Sewing Techniques and  Pattern Making | 5 | 5 | 25 | 75 | 100 |
| Core – VI | Theory-IV – Fashion Clothing Psychology | 5 | 5 | 25 | 75 | 100 |
| Elective - III | Practical-III – Principles of Pattern Making  Lab | 3 | 4 | 40 | 60 | 100 |
| IV | Skill Enhancement | Entrepreneurship | 1 | 1 | 25 | 75 | 100 |
| Skill Enhancement | NME-I  1.Adipadai Tamil2.AdvanceT amil  3.ITSkills for Employment/MOOC’S | 2 | 2 | 25 | 75 | 100 |
| Environmental Studies |  | **-** | 1 |  |  |  |
|  |  |  | **Total** | **22** | **30** | **255** | **645** | **900** |
| IV | I | T/OL | Language Tamil | 3 | 6 | 25 | 75 | 100 |
| II | E | English | 3 | 6 | 25 | 75 | 100 |
| III | Core –VII | Theory–V – Textile Dyeing and Printing | 5 | 5 | 25 | 75 | 100 |
| Core –VIII | Theory-VI – Garment Quality and  Specification | 5 | 5 | 25 | 75 | 100 |
| Elective -IV | Practical-IIB - Fabric Embellishment Lab | 3 | 3 | 40 | 60 | 100 |
|  | IV | Skill Enhancement | NME-II  1.Adipadai Tamil2.AdvanceTamil  3. Small Business Management /MOOC’S | 2 | 2 | 25 | 75 | 100 |
| Skill Enhancement |  | **2** | **2** |  |  |  |
| Environmental Studies |  | **2** | **1** |  |  |  |
|  |  | Total | **25** | **30** | **230** | **570** | **800** |

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| V | III | Core – IX | Theory-VII – Textile Testing | 4 | 5 | 25 | 75 | 100 | |
| Core – X | Theory-VIII – Home Textiles | 4 | 5 | 25 | 75 | 100 | |
| Core – XI | Theory–IX – Textile care and  Maintenance | 4 | 5 | 25 | 75 | 100 | |
| Core – XII | Theory-X – Visual Merchandising | 4 | 5 | 25 | 75 | 100 | |
| Elective – V | Practical-V – Textile Testing Lab | 3 | 4 | 40 | 60 | 100 | |
| Elective – VI | Practical-VI – CAD LAB | 3 | 4 | 40 | 60 | 100 | |
|  | Value Education | Career development/employability Skills | 2 | 2 |  |  |  | |
|  | Summer Internship/ Industrial Training | Internship | 2 | - |  |  |  | |
|  |  | Total | **26** | **30** | **180** | **420** | **600** | |
| VI | III | DSE |  |  |  |  |  |  | |
|  | | | | | | |
| Core – XIII – Garment Manufacturing Technology | 4 | 6 | 25 | 75 | | 100 |
| Core - XIV – Boutique Management | 4 | 6 | 25 | 75 | | 100 |
| Core - XV – Fabric Structure and Design | 4 | 6 | 25 | 75 | | 100 |
| Elective VII – Indian Traditional Textiles  and Embroidery | 3 | 5 | 25 | 75 | | 100 |
| Elective VIII - Library/Yoga etc | 3 | 5 |  |  | |  |
| Extension Activity – Career development/employability skills/Fieldtrip | 1 |  | - | - | |  |
| Professional Competency | 2 | 2 |  |  | |  |
| **Total** | | | | **21** | **30** | **100** | **300** | | **400** |
| **Grand Total** | | | | **140** | **--** | **--** | **--** | | **4100** |

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| **Sem.** | **Part** | **Course Code** | **Title of the Paper** | **Cr.** | **Hrs./ Week** | **Max. Marks** | | |
| **Int.** | **Ext.** | **Total** |
| I | III | AECC-I | Professional English for  LifeScience/ PhysicalScience-I | 4 | 4 | 25 | 75 | 100 |
| II | AECC -II | Professional English for  LifeScience/PhysicalScience-II | 4 | 4 | 25 | 75 | 100 |
| III | AECC-III | Professional English for  LifeScience/PhysicalScience-III | 4 | 4 | 25 | 75 | 100 |
| IV | AECC-IV | ProfessionalEnglishforLife Science/PhysicalScience-IV | 4 | 4 | 25 | 75 | 100 |

* TOL-Tamil/OtherLanguages,
* E–English
* CC-Corecourse– Corecompetency,criticalthinking,analyticalreasoning,researchskill&teamwork
* Allied -Exposurebeyondthediscipline
* AECC--

AbilityEnhancementCompulsoryCourse(ProfessionalEnglish&EnvironmentalStudies

) -Additional academic knowledge, psychologyand problem solvingetc.,

* SEC-SkillEnhancementCourse-Exposurebeyond

thediscipline(ValueEducati on,EntrepreneurshipCourse,Computerapplication for Science,etc.,

* NME -Non MajorElective–Exposurebeyond thediscipline
* DSE– Discipline specific elective –-Student choice– either or
  + Internship
  + Ifinternship– Marks=Internal=150(75+75)twomidtermevaluationthroughVivavoceandExter nal250 marks(Report=150+VivaVoce=100)=Total400marks
  + Theorypapersor
  + Project +3 theorypapers.
* Extension activity&MOOCs–Voluntarybasis

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| **Semester - I** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Fashion Designing** | **5** | **5** |
| **Objectives** | * To understand the elements and principles of design and apply it with garment design. * To study the wardrobe planning and figure irregularities and design garment according to the specific need. * To understand the fashion concepts and scope of fashion industry. * To know the basic principles of designing. * To Design the suitable garments for unusual figure | | | | | |
| **Unit – I** | **FASHION CONCEPT:**  Terms Related to the Fashion Industry - Fashion, Style, Fad, Classic, Collection, Chic, Mannequin, Fashion Show, Trend, and Haute Couture. Meaning of Fashion, Origin of Fashion, Meaning of Fashion Designing, Classification of Fashion, Influence of Fashion, Fashion  Illustration and Fashion Cycle. | | | | | |
| **Unit – II** | **DESIGN & ELEMENTS of DESIGN:**  Design –Definition, Types- Structural and Decorative Design, Requirements of a Good Structural and Decorative Design. Application of Structural and Decorative Design in the Dress, Elements  of Design -Line, Shape or Form, Color, Size and Texture**.** | | | | | |
| **Unit – III** | **PRINCIPLES OF DESIGN, ACCESSORIES & TRIMMINGS** :  Principles of Design – Balance, Rhythm, Harmony, Emphasis and Proportion. Fashion Accessories- Shoes, Hand Bags, Hats and Tie -Different Types/Shapes. Trimmings, Decorations and its application, Lace, Ric Rac, Appliqué, Embroidery, Smocking, fasteners, Belts and Bows,  Faggoting, Ruffles, Patch work and Quilting. | | | | | |
| **Unit – IV** | **COLOURS**:  Colours – Importance. Dimensions of colour, Colour Theory – Prang colour chart. Colour Harmonies - Monochromatic, Analogous, Complimentary - Double Complimentary Split Complimentary, Traid Colours, Cool Colours and Warm Colours and Moods of Colour. | | | | | |
| **Unit – V** | **FIGURE TYPES:**  Silhouettes and figure types-pear figure, hourglass figure, rectangular figure, wedge figure, overall roundness figure. Choosing the best dress for the figure types. Factors influencing design application for different age group, occasions and seasons  . | | | | | |
| **Reference and Textbooks:**  MacDonald, N. M. (2009). *Principles of flat pattern design 4th edition*. Bloomsbury Publishing USA. Calderin, J., &Volpintesta, L. (2013). *The Fashion Design Reference & Specification Book: Everything Fashion Designers Need to Know Every Day*. Rockport Pub.  Celhay, F., Magnier, L., &Schoormans, J. (2020). Hip and authentic. Defining neo-retro style in package design. *International Journal of Design*, *14*(1), 35-49.  Samara, T. (2020). *Design Elements: Understanding the rules and knowing when to break them-A Visual Communication Manual*. Rockport publishers.  Brown, B. (2001). Fashion Accessories:: The Complete 20th Century Sourcebook. *Reference Reviews*.  Michael, O. (2020). PTSD and female sexuality in the aftermath of childhood and adolescent sexual abuse in Una’s Becoming Unbecoming. *Journal of Graphic Novels and Comics*, *11*(4), 394-411. | | | | | | |
| **Outcomes** | * Learn elements and principles of design and its application in garment design. * Understand the type o trims and decorated accessories used in garment embellishment. * Gain knowledge on key designing principles. * Exploring the knowledge on figure types. * Students will be able to know about the national and international designers. | | | | | |

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| **Semester - I** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Fashion Designing** | **4** | **4** |
| **Objectives** | * To study about the basics of drawing. * To gain knowledge about shading techniques. * To learn about the color wheel and schemes. * To educate the students about head theory. * Toenablethestudents to develop croquis and design garments. | | | | | |
| **A. PREPARE SKETCHES FOR THE FOLLOWING**  Introduction to free hand drawing and basics of shading   1. Fashion Figure - 8 head theory . 2. Facial features- Eyes, nose, lips, ears. 3. Face, Hands, Legs-Different Positions. 4. Different Hairstyle for women –any five 5. Different poses of fashion figure (women, men and kids)- any five 6. **DRAW & SHADE THE FOLLOWING WITH SUITABLE SHAPE &SIZE**    1. Different types of Collars.    2. Different types of Sleeves.    3. Different types of Necklines.    4. Different types of Skirts.    5. Different types of Ladies Tops.    6. Different types of Shirt.    7. Different types of Pant (full and half).    8. Different types of Salwar Kameez with Fashion Figure.    9. Different types of Accessories-Bags, Foot wear, Hats.    10. Different types of Ornaments – Traditional, Modern and Antique.   **C. ILLUSTRATE FIGURES AND DESIGN GARMENTS**  1. Casual wear, formal wear and stylish wear  **D. PREPARE THE FOLLOWING CHARTS**   * Prang Colour Charts * Value Chart * Intensity Chart   **E. ILLUSTRATE GARMENT DESIGNS FOR THE ELEMENTS OF DESIGN**   * Line, Color, Texture, Shape, Size   **F. ILLUSTRATE GARMENT DESIGNS FOR THE PRINCIPLES OF DESIGN**   * Balance, Harmony, Emphasis, Proportion, Rhythm. | | | | | | |
| **Outcomes** | * Draw the different head theory which helps them to do the illustration. * Gain knowledge on basic drawing principles. * Understand the shading techniques. * Design the different figures using head theories. * Design and present the fashion figures with different poses. | | | | | |

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| **Semester - II** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Textile Science** | **4** | **4** |
| **Objectives** | * To understand the different fibers, yarn and fabric process. * To study the fiber properties, manufacturing process, and its application in textiles. * To enable students to gain knowledge in yarn making. * To enable the students to recognize the machineries used in the production process of yarn and fabric. * To educate different types of fabric construction. | | | | | |
| **Unit – I** | **FIBER MANUFACTURING**  Introduction to the Fibers - Classification of Textile Fibers- Natural and Manmade fibers, Characteristics - Primary and Secondary properties of Textile Fibers. Manufacturing Process,  Properties, Uses, application of Fibers. – Cotton, silk, wool, rayon, jute, polyester, recent textile fibers in market. | | | | | |
| **Unit – II** | **YARN MANUFACTURING**  Yarn **-** Conventional ring spinning method, chemical spinning method, others - Electrostatic  spinning, Airjet spinning, Twistless spinning. Yarn twist, yarn count. Types and characteristics of yarns. | | | | | |
| **Unit – III** | **WEAVING**  Preparation for weaving (warping, sizing, looming) Basic loom structure. Weaving- Definition, Primary motions – shedding – Definition and a brief explanation, picking (shuttle and shuttle less looms), beating up. Secondary motion – Definition and Ancillary motion. Types of  selvedges. Construction of cloth designs - Design, draft and peg plan. | | | | | |
| **Unit – IV** | **KNITTING**  Knitting – Definition, Comparison between woven fabrics and knitted fabric. Classification  of knitted fabrics weft knitting – plain knit stitch, Rib stitch, Warp knitting - Tricot knit, Raschel Knit, Milanese Knit, Identification of knitted fabric defects. | | | | | |
| **Unit – V** | **FELTED AND NON-WOVEN FABRICS**  Felted fabrics – Felting process. Types of felt, properties and uses of felt. Non woven – Definition, classification of non-woven fabrics, web forming techniques, bonding techniques, and finishing techniques. Characteristics of non-woven, uses of non-woven fabrics. Other fabrication  techniques- narrow fabrics, lace making, braiding and netting. | | | | | |
| **Reference and Textbooks:**  Carr, D. (Ed.). (2017). *Forensic textile science*. Woodhead Publishing. Murthy, H. S. (2016). *Introduction to textile fibres*. CRC Press.  Robertson, J., Roux, C., & Wiggins, K. G. (2017). *Forensic examination of fibres*. CRC press.  Kong, I., Tshai, K. Y., & Hoque, M. E. (2015). *Manufacturing of natural fibre reinforced polymer composites* (pp. 331-349). Springer, Cham.  Thangamani, K., &Sundaresan, S. (2022). *Fabric Manufacturing Technology: Weaving and Knitting*.  CRC Press.  Miao, M., & Xin, J. H. (Eds.). (2017). *Engineering of high-performance textiles*. Wood head Publishing. | | | | | | |
| **Outcomes** | **The students get insight knowledge in**   * Understand the raw materials and production process involved in both natural and manmade fiber. * Understand the properties of textile fibres. * Analyze the application of each textile fiber. * Acquire the knowledge of spinning, weaving and knitting process. * Understand the differences between woven and knitted fabrics. | | | | | |

**Remark :Soft Skill II- 2 hours handled by English Teacher: Totally 4+2 = 6 hour**

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| **Semester - II** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Basic Sewing Techniques Lab** | **2** | **4** |
| **Objectives** | * Impart sewing skills in creating garment components. * Tostitchthebasicsamples ofcollar,pocket,sleeveetc. * Students will be able to learn seam and seam finishes that have to be given to different fabrics. * Develop skills of students to create basic garment parts and various design elements required for a garment * To make student understand the basic skills related to hand stitches and seams. | | | | | |
| **Preparation Samples for the Following**   1. Basic stitches – temporary and permanent stitches, basic hand stitches. 2. Preparation of samples for Seams and Seam Finishes. 3. Preparation of samples for Hems. 4. Preparation of samples for Fullness. 5. Preparation of samples for Facings and Binding. 6. Preparation of samples for Plackets and Fasteners. 7. Preparation of samples for Sleeves - Plain Sleeve/Puff Sleeve (any one type). 8. Preparation of samples for Yokes -with and without Fullness. 9. Preparation of samples for Collar- Peter Pan Collar, Full Shirt Collar and Shawl Collar. 10. Preparation of samples for Pocket - Patch, Bound and Side Seam. | | | | | | |
| **Reference and Textbooks:**  Richter, G., Raban, D. R., &Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for Crowd*  *Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., &Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel and protective clothing*. CRC Press.  Paula, A. (2021). *Gendered Capitalism: Sewing Machines and Multinational Business in Spain and Mexico, 1850-1940*. Routledge.  Practical Clothing Construction – Part I, Mary Mathews, Cosmic Press, Chennai, 1986. Practical Clothing Construction – Part II, Mary Mathews, Cosmic Press, Chennai, 1986. Zarapker system of cutting –Zarapker. K. R., Navneet publications Ltd ,1994  Sewing and Knitting – A Readers Digest, Step -by -Step Guide, Readers Digest Pvt Ltd, Australia, 1993. | | | | | | |
| **Outcomes** | **The students will be able to**   * Develop samples for seams, seam finishes and hems. * Create samples for fullness, neckline finishes, skirt, sleeve, collars and yoke. * Basic stitching and creative skill will be developed which will help them to construct their garments * Use different stitches and seams as per the requirement of the garment. * Convert fullness of garment with different techniques like dart, pleats etc | | | | | |

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| **Semester - III** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Basic Sewing Techniques & Pattern Making** | **4** | **4** |
| **Objectives** | * To study about sewing machine parts functions and its applications. * To know the specialized machines used in garment industry. * To impart knowledge of machines and tools used for sewing * To learn about the various garment details and the way they are attached to finish a garment * To learn different types of finishing in garment construction. | | | | | |
| **Unit – I** | Sewing machines- parts and their function, care and maintenance. Tools for measuring, marking, cutting & pressing. Selection of thread and needle for various types of fabric. Bodice Measurement – preparation for measuring- Men’s and women’s measurement. Seams- Definition, types of seams and seam finishes, factors to be considered in selection  of seam. Fullness- definition, types of fullness, Calculating material requirements. | | | | | |
| **Unit – II** | **Collars –** definition, parts of collar, factors to be considered in designing collar, classification of collar.  **Yokes: -** Definition, selection of yoke design, creating variety in yoke. Drafting patterns for yoke without fullness, yoke with fullness within the yoke & yoke supporting or releasing fullness. Attachment of yokes. Neck line finishes- definition, bias facing, bias binding. | | | | | |
| **Unit – III** | **Sleeves:-** Classification of sleeves, types of sleeves- plain, puff at top, bottom, bell, bishop, circular, leg-o-mutton, sleeveless styles, kimono & raglan. Pattern preparation for these sleeves.  **Pockets-** definition- selection of pocket and creating variety in pockets – Plackets and its types. Skirts: Different types of skirts – Drafting patterns for semicircular and circular skirts. | | | | | |
| **Unit – IV** | **Fabric preparation:** Preparing the fabric for cutting - Lay planning- Introduction, Rule to remember in pattern layout. Types of layout. Transferring pattern markings stay stitching, ease stitching.  **Methods of Pattern Making** – drafting – principles for pattern drafting- Preparing draft for basic bodice, sleeve and skirt pattern – Draping – draping Techniques - Flat pattern Techniques: Definition, Pivot method, Slash & spread method. | | | | | |
| **Unit – V** | **Commercial pattern -** Development of commercial pattern, merits and demerits. Pattern Grading - Definition, Grading terminology, selecting a grading system, grading techniques, their advantages and disadvantages. Computer grading. Grading procedures. Grading of basic block using draft grading systems.  **Pattern alteration:** General principles for pattern alteration. Common pattern alteration in a fitted bodice pattern. Garment fitting and Assembling Standards for a good fit, checking for good fit, solving fitting problems and remedies. | | | | | |

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| **Reference and Textbooks:**  Nayak, R., & Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing.  Vilumsone-Nemes, I. (2018). *Industrial cutting of textile materials*. Woodhead Publishing. Nayak, R., & Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead  Publishing.  Richter, G., Raban, D. R., & Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for Crowd Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., & Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel and protective clothing*. CRC Press.  Helen Joseph Armstrong, (2013). *Patternmaking for Fashion Design*. New Delhi: Pearson EducationIndia.  Muthu, S. S., & Gardetti, M. Á. (Eds.). (2020). *Sustainability in the Textile and Apparel Industries: Production Process Sustainability*. Springer Nature.  Mullet, K. K. (2015). *Concepts of pattern grading: Techniques for manual and computer grading*.  Bloomsbury Publishing USA.  Armstrong, H. J. (2013). *Patternmaking for Fashion Design: Pearson New International Edition PDF - eBook*. Pearson Higher Ed.  MacDonald, N. M. (2009). *Principles of flat pattern design 4th edition*. Bloomsbury Publishing USA. | |
| **Outcomes** | **The students gain knowledge in**   * Garment industry production process and its management process. * Familiarize the different types of machines and special attachments adopted in garment industry. * basic understanding of garments, machines and their use in apparel and fashion industry * Students will be able to know about the special attachments and their functions. Students will develop an understanding of how different constructional tools help to make   a perfect garment. |

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| **Semester -III** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Fashion Clothing Psychology** | **4** | **4** |
| **Objectives** | * Impart knowledge about history of fashion * To study about world fashion centers * To know the psychology needs of consumer to purchase of clothing. * To study about the national and international fashion designer. | | | | | |
| **Unit – I** | **HISTORY OF INDIAN FASHION**  Beginning of costume – terminologies in history of Indian costume – Indus Valley and  Harappa Period (3300 – 1300BC) – Vedic Period (1500 – 500BC) – Gupta Period (7thcentury AD) – Mughal Period – British Rule | | | | | |
| **Unit – II** | **FASHION PSYCHOLOGY**  Factors influencing Fashion Changes-Psychological Needs of Fashion, Social Psychology of Fashion, Technological, Economical, Political, Legal and Seasonal Influence. Role of Costume as a Status Symbol, Personality and Dress, Repetition of Fashion | | | | | |
| **Unit – III** | **FASHION CHANGES AND CONSUMER ACCEPTANCE**  Fashion Leaders, Fashion Innovators, Fashion Motivation, Fashion Victim, Fashion followers.  Fashion Forecasting - Market Research, Evaluating the Collection, Fashion Services, Colours Services, Video Services, Newsletter Services, Websites, Directories and references. | | | | | |
| **Unit – IV** | **FASHION DESIGNERS**  Indian Designers-Rohit Khosla, GitanjalKsshyap, Hemant Trivedi, J.J. Valaya, Ritu Kumar, Rohit Bal, TarunTahiliani, Sangeethe Chopra, Bhamini Subramaniam, Anju Modi, Ravi Bajaj, Ritu Beri | | | | | |
| **Unit – V** | **WORLD WIDE FASHION CENTERS**  World fashion Centers- France, Italy, England, Germany, Canada, New York. | | | | | |
| **Reference and Textbooks:**  Biswas, A. (2017). *Indian costumes*. Publications Division Ministry of Information & Broadcasting.  Kumari, P. (2021). *Innovation in Design of Traditional Mashru Textile for Product Diversification* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).  Elaine Stone, The Dynamics of Fashion, Fairchild Publications, New York, 2001.  Jenny Davis, A Complete Guide to Fashion Designing, 1st Edition, Abhishek Publication, Chandigarh, 2009.  Frings, Fashion from Concept to Consumer, 7th Edition, Dorling Kindersley Publishing Inc, India, 2008. Man Meet Sodhia, History of Fashion, Kalyani Publishers, New Delhi, 2009.  Man Meet Sodhia, History of Fashion, Kalyani Publishers, New Delhi, 2007. Pundir,Fashion Technology Today and Tomorrow,A Mittal Publication,New Delhi, 2007.  M.R.Soloman& N.J. Rabolt, Consumer Behaviour in Fashion, Dorling Kindersley Publishing Inc, India, 2006.  Benneett, “Femina Book of Fashion”, coleman& Co., Ltd., Mumbai (1998) | | | | | | |
| **Outcomes** | The students are able to   * Knowledge about the fashion designers * Analyze about the fashion changes and the acceptance * Understand the fashion industry and fashion forecasting. * Able to learn fashion leader, Fashion environment and adoption * Acquire knowledge about on Indian and World fashion designers. | | | | | |

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| **Semester - II** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Fabric Embellishment-Practical** | **2** | **4** |
| **Objectives** | * Design and construct fashion accessories based on theme. * To understand the different accessories available in fashion market. * To teach and train the students in the basics of hand and machine embroidery. * To impart knowledge on various types of embroidery stitches. * To make them to acquire skills essential to evaluate the performance of accessories | | | | | |
| 1. **Basic Hand Stitches**    1. Running – Whipped Running Stitch, Threaded Running Stitch    2. Hemming    3. Back Stitch - Whipped Back Stitch, Threaded Back Stitch 2. **Basic Embroidery Stitches**    1. Chain stitch and its types    2. Fern Stitch    3. Stem Stitch    4. Lazy Daisy Stitch and its types    5. Blanket (or) Button Hole Stitch    6. Satin 3. **Advanced Embroidery Stitches**    1. French Knot,    2. Bullion Knot    3. Feather – Double Feather Stitch, Closed Feather Stitch    4. Herring bone and its types    5. Cross Stitch 4. **Other surface Embroidery**    1. Cut work    2. Mirror work    3. Applique/ Patch – Hand Applique, Machine Applique    4. Bead and sequence    5. Zardosi    6. Tasseled – Corded Tasseled    7. Fringes | | | | | | |
| **Reference and Textbooks:**  Shailaja D Naik , Traditional Embroideries of India, APH Publishing, 1996  Megan Eckman, Everyday Embroidery for Modern Stitchers, C&T Publishing, 2020  Libby Moore, Thread Folk: A Modern Makers Book of Embroidery Projects and Artist Collaborations, Paige Tate & Co, 2019 | | | | | | |
| **Outcomes** | **Thestudents gain knowledgein**   * Different apparel accessories and its uses in garment design. * Design and construct the accessories based on theme. * Attain knowledge on the embroidery tools and the techniques. * Identify the different hand embroidery stitches and Indian traditional embroidery. * Thorough understanding of the different accessories and embellishments. | | | | | |

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| **Semester – IV** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Textile Dyeing and Printing** | **4** | **4** |
| **Objectives** | * To study the fabric preparatory process in textile processing industry. * To impart knowledge in the field of pre-processing, processing and post-processing of textile substrate. * To educate students about textile dyeing and printing * To make them understand various textile finishes. * To introduce different methods and materials of dyeing and printing. | | | | | |
| **Unit – I** | **TEXTILE PROCESS**  Water, water Hardness, types, quality required for wet processing industries, softening process, Need for processing - Dry and wet processing for fabrics – Preparatory wet processing –  Singeing, desizing, scouring, bleaching, mercerizing, degumming and carbonizing. | | | | | |
| **Unit – II** | **DYEING**  Classification of dyes – Natural Dyes, mordants and its types, mordanting techniques. Dyeing method, Advantages & Disadvantages of natural dyes. Synthetic dyes – Basic dyes, Direct dyes, vat, sulphur, Napthol, Reactive, Azoic, acid, and disperse dyes. | | | | | |
| **Unit – III** | **DYEING METHODS**  Stages of dyeing Methods of Dyeing - Batch, Winch, Jigger, Package, hank dyeing.  Colour fastness tests. Recent advancement and technology in dyeing. | | | | | |
| **Unit – IV** | **PRINTING**  Printing-introduction to printing, Differences between printing and dyeing, preparation of fabric for printing-cotton, polyester, wool and silk, Methods of Printing, Preparation of printing  paste, Selection of thickening agents. | | | | | |
| **Unit – V** | **PRINTING METHODS**  Direct Printing: Block Printing, Stencil printing, Screen printing, Discharge Printing, Resist printing – batik and tie and dye. Other Printing Methods: Mino printing Inkjet printing, Heat  transfer printing, photo printing. | | | | | |
| **Reference and Textbooks:**  Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Muthu, S. S. (Ed.). (2018). *Circular Economy in Textiles and Apparel: Processing, Manufacturing, and Design*. Woodhead publishing.  Mahapatra, N. (2018). Textile Dyes. *Journal of Textile and Clothing Science*, *1*(1), 01-02.  Panda, H. (2013). *A concise guide on textile dyes, pigments and dye intermediates with textile printing technology*. Niir Project Consultancy Services.  Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Vankar, P. S. (2017). *Natural dyes for textiles: Sources, chemistry and applications*. Woodhead Publishing. | | | | | | |
| **Outcomes** | **Thestudents gain knowledgein**   * Dyeing and printing methods and principles of colour application. * Developknowledgeintextileandgarment processingsector. * Obtain knowledge on chemical processing of cotton and blended materials. * Analyze the parameters and categorize the recipes for chemical processing of textile materials. * Categorize and select the appropriate techniques to process the yarn and fabrics. | | | | | |

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| **Semester – IV** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Garment Quality and Specifications** | **4** | **4** |
| **Objectives** | * To know about raw material quality control Specifications. * To understand the importance of quality control in textiles and apparel industries. * To study the apparel industry costing methods, types and calculation of fabric costing. * To impart knowledge on principles of apparel costing and the factors involved for costing. * To facilitate better understanding of apparel costing and foreign exchange management. | | | | | |
| **Unit – I** | **BASICS OF QUALITY CONTROL**  Definition and Scope of Quality Control – Establishing Merchandising Standards – Establishing Raw Material Quality Control specifications – Quality Control of Raw Material. Inspection system – 4  point, 10 point system | | | | | |
| **Unit – II** | **QUALITY CONTROL SYSTEM**  Establishing Processing quality specification – Training Quality Control Personnel – The Quality Standard Control – Quality Control Inspection, Procedures for processing – Quality control of finished garments – Quality control and Government contacts – Quality Control for Packaging, Warehousing and shipping. | | | | | |
| **Unit – III** | **BASICS OF PRODUCTION CONTROL**  Function of Production control – Production, Analysis – Quality Specifications – Quantitative specifications – Scope of Apparel Manufacturing Activity – Co-ordinating Departmental Activities –  Distribution of Documents and Records. | | | | | |
| **Unit – IV** | **PRODUCTION CONTROL SYSTEM**  Type of Control forms – Basic Production Systems – Principles for Choosing a Production System – Evaluating Production Systems – Flow Process Grids and Charts. | | | | | |
| **Unit – V** | **COST CONTROL**  Function of Cost Control: Types of Costs and Expenses – Apparel Manufacturing Cost Categories – Sales Cost Control – Purchasing Cost Control – Production Cost Control – Administration  cost control – Cost Ration Policies. | | | | | |
| **Reference and Textbooks:**  Brahams, S. B. (2016). *The fundamentals of quality assurance in the textile industry*. Productivity Press. Nayak, R., &Padhye, R. (Eds.). (2015). *Garment manufacturing technology*. Elsevier.  Gaspa, S., Michel, C., &Nosch, M. L. (2017). *Textile Terminologies from the Orient to the Mediterranean and Europe, 1000 BC to 1000 AD*. Lulu. com.  Thomas E. Johnson. & Donna L. Bade. (2010). Export Import Procedures & Documentation. NewYork: Amacom.  Karthik, T., Ganesan, P., & Gopalakrishnan, D. (2016). *Apparel manufacturing technology*. CRC Press. Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Tresnadi, C., &Sachari, A. (2015). Identification of values of ornaments in Indonesian batik in visual content of Nitiki game. *Journal of Arts and Humanities*, *4*(8), 25-39.  Bédat, M. (2021). *Unraveled: The Life and Death of a Garment*. Portfolio/Penguin. | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * Yarn and fabric properties of textile material and apply the tools and techniques of Quality management to manufacturing and services processes. * Students will be able to understand the sustainability process required in textile and apparel industry. * Relate the factors that decide the cost of apparel products. * Apply knowledge in calculating the raw materials and accessories cost to derive the cost of basic apparel products. * Obtain knowledge in financial management and budgeting process in apparel industry. | | | | | |

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| **Semester - IV** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Garment Construction Lab** | **2** | **4** |
| **Objectives** | * The students are able to design and construct the garment for different age group of kids. * To learn about the theme-based design garments. * To acquaint students with various garments components by providing them the practical skills. * To give knowledge of various finishing techniques related to stitching. * To acquire knowledge about how to complete a garment with different styles. | | | | | |
| **Designing, Draft and construct the following Garments**   1. Infant wears- Bib, Panty and Jabla 2. Baba suit / Romper. 3. Children’s frock - 2 variety 4. Saree Petticoat- Six Panel, Decorative Bottom. 5. Blouse- Front/Back Open, Fashioned Neck, Waist Band at Front, with Sleeve. 6. Salwar / Churidhar 7. Kameez with/ without Slit, with /without Flare, with/without Opening, with/ with out Panels, with/ without Sleeve. 8. Nightie / Maxi with / without fullness, with/without opening, with/without yokes, with/without puff sleeve. 9. Slack Shirt-with Collar, Half Sleeve, Patch Pocket. 10. Kalidhar Kurta -Kali Piece, Side Pocket, Round Neck, Half Open. 11. Pyjama/Bermudas-Elastic/Tape attached Waist, with/without fly. 12. One piece pant – fly attached, separate belt attached, front and back dart**.**   . | | | | | | |
| **Reference and Textbooks:**   * Zarapker K. R, Zarapker System of Cutting, Navneet Publications (India) Ltd, Mumbai, 2012 * Winifred Aldrich, Metric Pattern Cutting for Women's Wear, 5th Edition, Blackwell Publishing, 2015 * Practical Clothing Constructing-Part I and II, Mary Mathews, Cosmic Press, Chennai,1986. * Cutting and sewing theory, Gayatri Verma, Kapil Dev, Computech Publication Ltd, India,2019. * Pattern cutting and Making up, the professional approach, Martin M. Shoben and Janet P.Ward, Routledge Taylor and Francis Group, London and New York, Revised edition,2011 | | | | | | |
| **Outcomes** | **Thestudentsareableto**   * Develop the designs by own and construct the garment design. * Understand the basic concepts of patternmaking and kids wear. * Students will gain the understanding regarding different garment components and their construction. * Design and to construct complete garment. * Develop patterns for men and woman using drafting method. | | | | | |

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| **Semester - V** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Textile Testing** | **4** | **4** |
| **Objectives** | * To learn about fibre, yarn and fabric quality testing. * Acquire better understanding importance of quality testing * Tolearnthefibretesting methods ofdifferentfibreproperties. * Tostudytheyarnandfabric properties. * Tounderstandtherelationship ofqualityparameterswithfabricenduse | | | | | |
| **Unit – I** | **QUALITY CONTROL: DEFINITION AND ITS IMPORTANCE.**  Humidity: Definition and its influence on fiber properties Standard atmospheric condition, Standard testing atmosphere. Standard regain, Moisture content and regain. Measurement of  atmospheric condition – wet and dry bulb Hygrometer and sling Hygrometer. | | | | | |
| **Unit – II** | **FIBRE TESTING**  Fiber Testing: Fiber length – Baer sorter and Fibrograph, Fiber strength – Stelometer, Fiber fineness – Micronaire, Fiber maturity, Trash content - determination – Trash analyzer. | | | | | |
| **Unit – III** | **YARN TESTING**  Yarn testing: Determination of yarn count – quadrant, Analytical &Beesley balance. Twist – Direction of twist and amount of twist, Strength of yarn-Single yarn strength tester. Crimp –  Shirley crimp tester. Hairiness – Uster Hairiness tester. | | | | | |
| **Unit – IV** | **FABRIC TESTING**  Fabric Testing: Fabric strength tester – Tensile strength, tearing strength & bursting strength. Abrasion – Types of abrasion – pilling – Martindale pill box tester. | | | | | |
| **Unit – V** | **FABRIC TESTING**  Drape – Drape meter, Fabric stiffness - Shirley stiffness Tester, crease recovery – Shirley crease  recovery tester. Thermal conductivity, water absorbency test, Water repellency tester. | | | | | |
| **Reference and Textbooks:**  Booth, J.E. (2018**).** *Principles of Textile Testing***.** New Delhi: CBS Publishers and Distributors Pvt. Ltd. Elliot B. Grover., Dame S. Hamby***.*** (2016).*Handbook of Textile Testing and Quality Control***.** New  Delhi: Wiley India Edition.  Angappan, P. & Gopalakrishnan, R. (2002).*Textile Testing***.** Komarapalayam: SSM Institute of Textile Technology.Komarapalayam  Kothari, V. K. (1999).*Testing and Quality Management* (Vol.1). New Delhi: IAFL Publications**.** Koushik, C.V. & Chandrasekaran, R. (2004).*Textile Testing***.** New Delhi: NCUTE Publication. Marjorie A. Taylor. (1990). *Technology of Textile Properties*. London: Forbes publicationsLtd. Saville, B. P. (2002). Physical *Testing of Textiles***.** Cambridge: Woodhead Publishing Ltd. | | | | | | |
| **Outcomes** | * Learn the basic terms and definition of apparel testing and methods of evaluation. * Understanding the various principles and methods are used for fibre, yarn, fabric testing. * About the properties of various materials. * Learn about the testing parameters and machineries. * Understanding the garment and accessory testing methods. | | | | | |

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| **Semester - V** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Home Textiles** | **4** | **4** |
| **Objectives** | * To understand the importance of household materials and it application areas. * To know about the various production centers in India. * To understand the production techniques, various selection criterion such as raw materials, design and fabric type. * To know about the varieties of Home textile products and fibre used for manufacturing the products. * To understand the quality aspects for home textiles | | | | | |
| **Unit – I** | Introduction to home textiles, definition, types of home textiles, factors influencing selection of  home textiles, recent trends in home textiles. | | | | | |
| **Unit – II** | Floor and wall coverings – definition, types of floor covering –hard, soft and resilient floor coverings and uses and care and maintenance of floor coverings. Wall covering- definition, uses, care and maintenance of wall coverings | | | | | |
| **Unit – III** | Door and window treatments –definition and parts of door and windows, curtains and draperies – definition and materials used for curtains and draperies. Types of Curtains –draw, tailored, pleated, cafe, three tier curtains. Types of Draperies – swags. Accessories- rods hook, rails, racks,  curtain tape pins | | | | | |
| **Unit – IV** | Soft furnishings for living and bed linen. Introduction to living and bedroom linens, types-sofa, sofa covers, wall hangings, cushion, cushion covers, upholsteries, bolster and bolster covers, bed sheets, covers, blankets, blanket covers, comfort and comfort covers, bed spreads, mattress and  mattress covers, pillow and pillow covers, pads, uses and care. | | | | | |
| **Unit – V** | Soft furnishings for kitchen and dining, types of kitchen linens – kitchen towel, aprons, dish cloth, fridge, grinder and mixie covers, mittens, fridge holders –their uses and care. Types of dining table mat, dish/pot holders, cutlery holder, fruit baskets, hand towels-uses and care. Bathroom  linens – types, uses and care | | | | | |
| **Reference and Textbooks:**  Anita Tyagi, (2011). *Textiles for Apparel and Home Furnishing*. New Delhi: Sonali Publications. Karthik, T. (2016). *Home Textiles*. New Delhi: Astral International Pvt Ltd  Ghosh Dr. Ashis Kumar. (2011). Traditional Knowledge of Household. New Delhi: Daya Publishing House.  Subrata Das, 2018, *Performance of Home Textiles*, Woodhead Publishing Pvt. Ltd, Second Edition T Rowe, Interior textiles- Design and Developments, Woodhead Publishing Pvt. Ltd, 2009 Hamlym, (2001). Bed and Table Linen. New York: Octopus Publishing Group Ltd.  Cheryl Mendelson, (2005). Home Comforts the Arts and Science Keeping House. New York: Scroper Publisher.  David Holloway, (2000). The Essential Book of Home Improvement Techniques. London: Marshals Publications.  James Merrell, (1995). Living with Decorative Textiles. London: Thames and Hudson Ltd. | | | | | | |
| **Outcomes** | **The students are able to**   * Generalize knowledge about the varieties of home furnishing materials and finishing methods. * Analyze the knowledge on suitability of furnishings care & maintenance of home furnishing materials. * Determine the various treatments and finishes given for home textiles materials * Analyze the advancements and developments in interior designing and home furnishing. * Select the suitable technique for care and maintenance of home textiles products | | | | | |

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| **Semester –V** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Textile Care and Maintenance** | **4** | **4** |
| **Objectives** | * Impart knowledge about laundering for different fabrics. * To study about the machines and equipment’s used in the washing, storing and ironing process * Impart knowledge on the types of wash care labels. | | | | | |
| **Unit – I** | Laundering- different method of laundering, Laundry soaps and liquids- composition of soap, types of soap, soap less detergents, detergent manufacture, advantages of detergents. Fabric  conditioner and its applications. | | | | | |
| **Unit – II** | Finishes – Stiffening Agents – Starch (cold water and hot water) Other stiffening agents, preparation of starch Laundry blues, and their application. Stain removal – common methods of removing stains. | | | | | |
| **Unit – III** | Washing – Points to be noted before washing. Machine – types semi-automatic and Fully automatic; Top loading and front loading; wash cycles in a washing machine Drying equipment’s– Indoor and outdoor drying Iron box types - automatic iron box and steam iron.  Ironing board – different types and iron setting for different types of fabric. | | | | | |
| **Unit – IV** | Laundering of different fabrics – cotton and linen, woolens, colored fabrics, silks, rayon and  nylon. Special types of Laundry – waterproof coats, silk ties, leather goods, furs, plastics, lace. | | | | | |
| **Unit – V** | Storing – Methods of storing clothes, Best way to store clothes Dry cleaning – Benefits,  differences between dry cleaning. Steps in dry cleaning process Care labels – Importance and Types - The International Care Labelling System. | | | | | |
| **Reference and Textbooks:**  Textbook of Textile and Laundry, Seema Yadav, Anmol publication, 2011  Fundamentals of Textiles and their Care- SusheelaDantyagi , Orient Longmann Ltd, 1996, Fifth Edition Wingate I B , Textiles fabrics and their Selection, Prentice-Hall Inc Publishers, 1946  Mildred T. Tate and Glisson O, Family Clothing, John Wiley & Sons Inc, Illinois, 1961  Durga Deulkar , Household Textiles and Laundry Work, Amla Ram & Sons, Delhi, 1951 | | | | | | |
| **Outcomes** | * Interpret the preparatory process for fabric * Discuss the stain removal methods and the care labels * Analyse the methods of laundering | | | | | |

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| **Semester - V** | | | | | | |
| **CC** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Visual Merchandising** | **4** | **4** |
| **Objectives** | * To know about the retailing, store plan and importance of marketing strategies. * To acquire knowledge about visual merchandising and planning to set up the display in the apparel sector * To create an knowledge about merchandising * To know about how merchandising used in sales & promotion * To understand the role played by the fashion buying offices | | | | | |
| **Unit – I** | **INTRODUCTION TO MERCHANDSING**  Visual Merchandising – Definition and Function, History of visual merchandising, Role of visual  merchandising, Understanding retail in India. | | | | | |
| **Unit – II** | **STORE PLANNING AND FIXTURES**  Store planning and fixtures – Floor plan, The purpo se of planning fixtures, types of fixture. | | | | | |
| **Unit – III** | **CIRCULATION PLAN**  Circulation plan – Rules of circulation, Types of Circulation plans – Free flow, Grid, Race track,  Herringbone and spin | | | | | |
| **Unit – IV** | **MERCHANDISE PRESENTAION**  Merchandise presentation – meaning, principles of merchandise presentation, categories in  merchandise presentation, Dominance factor in merchandise presentation, elementary of display – Store Exteriors and Interiors. | | | | | |
| **Unit – V** | **WINDOW DISPLAY**  Promotional Display Vs Institutional Display, Types of Mannequins, Lighting, Visual Merchandising Tool Kit, Quality and process in Visual Merchandising**.** | | | | | |
| **Reference and Textbooks:**  Martin M. Peglar (SVM). (2018).*Visual Merchandising and Display***.** New York: FairchildPublication. Bailey, S., & Baker, J. (2021). *Visual merchandising for fashion*. Bloomsbury Publishing.  Bell, J., &Ternus, K. (2017). *Silent selling: best practices and effective strategies in visual merchandising*.  Bloomsbury Publishing USA.  Ebster, C., &Garaus, M. (2015). *Store Design and Visual Merchandising: Store Design and Visual Merchandising*. Business Expert Press.  Bailey, S., & Baker, J. (2021). *Visual merchandising for fashion*. Bloomsbury Publishing. | | | | | | |
| **Outcomes** | **The students are able to**   * Learn the store image, window display, mannequin and interior & exterior design. * Acquire knowledge about on visual merchandising and principles * Able to analyze the current trend and technology in the industry. * Learn the layout of retail space, space assignment, product grouping, color, lighting, window display and elements of visual communication, including presentation method. * Learn the art of creating, developing and executing merchandising. | | | | | |

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| **Semester - V** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Textile Testing – Practical** | **2** | **4** |
| **Objectives** | * To learn the fibre testing methods of different fibre properties. * To study the yarn and fabric properties and do experiment the above testing. * To understand the relationship of quality parameters with fabric end use. * To practice the various textile testing equipment in standard atmospheric conditions. * To impart knowledge in basics of testing and the testing atmospheric conditions in a testing lab. | | | | | |
| 1. **YARN TEST**    1. To identify the yarn and fibers using binocular microscopic test    2. To determine the yarn count using single yarn twist tester.    3. To determine the yarn count using Beasley balance method. 2. **FABRIC TEST** 3. To determine the thickness of a fabric using thickness tester. 4. To determine the stiffness of a fabric using stiffness tester. 5. To determine the drape of a fabric using drape meter. 6. To determine the shrinkage of a fabric using shrinkage template and scale. 7. To determine the strength of a fabric using tensile strength tester. 8. To determine the bursting strength of a fabric using bursting tester. 9. To determine the crease recovery of the fabric using crease recovery tester 10. To determine the rubbing fastness of a dyed fabric using Crock Meter with grey scale | | | | | | |
| **Reference and Textbooks:**  Booth, J.E. (2018**).** *Principles of Textile Testing***.** New Delhi: CBS Publishers and Distributors Pvt. Ltd. Elliot B. Grover., Dame S. Hamby***.*** (2016).*Handbook of Textile Testing and Quality Control***.** New  Delhi: Wiley India Edition.  Angappan, P. & Gopalakrishnan, R. (2002).*Textile Testing***.** Komarapalayam: SSM Institute of Textile Technology.Komarapalayam  Kothari, V. K. (1999).*Testing and Quality Management* (Vol.1). New Delhi: IAFL Publications**.** Koushik, C.V. & Chandrasekaran, R. (2004).*Textile Testing***.** New Delhi: NCUTE Publication. Marjorie A. Taylor. (1990). *Technology of Textile Properties*. London: Forbes publicationsLtd.  Saville, B. P. (2002). Physical *Testing of Textiles***.** Cambridge: Woodhead Publishing Ltd. | | | | | | |
| **Outcomes** | **Thestudents getinsight knowledgein**   * Testing of different types of textile materials using the relevant instrument. * Testing the fibre, yarn and fabric with respective properties by using the instrument. * Operate the equipment without any assistance while carrying out the testing of fibres, yarns and fabrics. * Interpret the data more accurately on their own. * Understand the importance of standard atmospheric conditions required for testing. | | | | | |

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| **Semester - V** | | | | | | |
| **CC/** | | | **Core** | **Practical** | **C** | **H/W** |
| **Course code** | |  | **Computer Aided Designing – Practical** | **2** | **4** |
| **Objectives** | * To learn the CAD software tools and its application. * To develop pattern for different patterns of different designs and grade the patterns. * Develop the Patterns styles using any CAD Software * To grade the Patterns to various sizes and estimate the lay length and marker efficiency. * To gain an understanding of the core concepts and technologies. | | | | | |
| **CREATE THE FOLLOWING DESIGNS**  **Motifs**   1. Embroidery Designs for Kerchiefs. 2. Necklines. 3. Chest Prints. 4. T-Shirt.   **Children’s Garments**   1. Jabla 2. Frocks 3. Sun Suit   **Women’s Garments**   1. One Piece Dress 2. Middi& Tops 3. Salwar Kameez   **Men’s Garments**   1. T-Shirt 2. Shirt 3. Pant   Create Logos for Branded Companies. Create Label for Garments Companies. | | | | | | |
| **Reference and Textbooks:**   * Fashion Design Drawing &Prensatation, Ireland Patrick John, B T Batsford Ltd, 2006. * Fashion Design Illustration: Children, Ireland Patrick John, B T Batsford Ltd, 2003. * Fashion Sketch Book, Bina Abling, Fair Child Publication, New York,2006. | | | | | | |
| **Outcomes** | **The students are able to**   * Gain practical experience on pattern making in different garment marker planning and grading. * Able to design and making pattern for kids, women’s and men’s wear by CAD Pattern Making Software. * knowledge of different software used in patternmaking grading. * know about internet surfing and will get fundamental knowledge of computer networking. * Learn core concepts and technologies. | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Garment Manufacturing Technology** | **6** | **6** |
| **Objectives** | * To study about sewing machine parts functions and its applications. * To know the specialized machines used in garment industry. * To impart knowledge of machines and tools used for sewing * To learn about the various garment details and the way they are attached to finish a garment * To learn different types of finishing in garment construction. | | | | | |
| **Unit – I** | Planning, drawing and reproduction of the marker. The requirements of marker planning. Efficiency of the marker plan. The spreading of the fabric to form a lay. The requirement of the  spreading process. Methods of spreading, nature of fabric packages. The cutting of fabric, objectiveness of cutting and methods of cutting | | | | | |
| **Unit – II** | The properties of seam, seam types, stitch types. Sewing machine feed mechanism, sewing machine needles, Sewing threads, fiber type, and construction of thread finishes. Thread sizing, thread packages, cost, properties and seam performance. Sewing problems, Problems of stitch formation. Problem of pucker, problems of Damage to fabric along the stitch line. Testing for sewability and Tailorability. | | | | | |
| **Unit – III** | Basic sewing machines and associated work aids, simple automation. The use of components & trims – Labels and motifs, lining, Interlining, wadding, lace, braids & elastics, Hooks and loop fastening, Seam binding and tape, Shoulder pad, Eyelets & laces, Zip fastener, Buttons, Tack  buttons, Snap fasteners and Rivets, Performance properties of components and trims. | | | | | |
| **Unit – IV** | Fusing – Definition, advantages of fusible interlinings, Fusing process. The means of fusing, Fusing equipments, Methods of fusing, quality control in fusing. Alternative of fusible  interlining. | | | | | |
| **Unit – V** | Pressing: the purpose of pressing, categories of pressing, means of pressing, pressing  equipments and methods, pleating, permanent press. Pressing practices in Indian Industries | | | | | |
| **Reference and Textbooks:**  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Vilumsone-Nemes, I. (2018). *Industrial cutting of textile materials*. Woodhead Publishing.  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Richter, G., Raban, D. R., &Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for*  *Crowd Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., &Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel And protective clothing*. CRC Press.  Paula, A. (2021). *Gendered Capitalism: Sewing Machines and Multinational Business in Spain and*  *Mexico,1850-1940*. Routledge. | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * Garmentindustryproductionprocess anditsmanagement process. * Familiarizethedifferenttypesofmachinesandspecialattachmentsadoptedin garmentindustry. * basic understanding of garments, machines and their use in apparel and fashion industry * Students will be able to know about the special attachments and their functions. * Students will develop an understanding of how different constructional tools help to make a perfect garment. | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Boutique Management** | **6** | **6** |
| **Objectives** | * To acquaint the students for better managerial skills on Boutique * To enable the students to understand the intricacies of retail business * To make student understand the importance of displaying their work in the best possible way * To prepare students for the world of fashion, where they can grab job opportunities by showcasing and explaining their talent through portfolio. * To impart skills for portfolio presentations. | | | | | |
| **Unit – I** | **INTRODUCTION TO BOUTIQUE**  Boutique – definition – management Skills required to set up a boutique – identifying  target market and customer – selection of boutique name – types of boutique – low- end and high- end boutiques. | | | | | |
| **Unit – II** | **INFRASTRUCTURE AND VISUAL MERCHANDISING**  Choice of location and space management – infrastructure requirement – fashion accessories in boutique – boutique interior – visual merchandising – store layout – types  of display – exterior display – interior display – tools for visual merchandising – signage –props – mannequins – fixtures and lightings. | | | | | |
| **Unit – III** | **RESOURCE MANAGEMENT**  Staffing – selection of generalists and specialists – Customer relationship management –Man power planning – performance management – employee relations. | | | | | |
| **Unit – IV** | **TOOLS AND MATERIALS**  Boutique marketing tools and promotional kit – material sourcing – bookkeeping for boutique and  maintaining stock. | | | | | |
| **Unit – V** | **FINANCIAL MANAGEMENT**  Project finance – cash control and cash flow analysis – managing and start up the boutique business – boutique visit – boutique project report. | | | | | |
| **Reference and Textbooks:**  Golizia, D. (2021). *The Fashion Business: Theory and Practice in Strategic Fashion Management*.  Routledge.  Briana Stewart, (2014). *Opening a boutique store: how to start your own boutique*. USA, NC: BullCity Publishing.  GibsonG. Vedomani. (2012)*. RetailManagement*.Mumbai:JaicoPublishinghouse.Jonny Vecchi, A. (Ed.). (2016). *Handbook of research on global fashion management and*  *merchandising*. IGI global.  Biswas, T., Samadder, R., Gupta, K., & Nandi, S. (2021, September). *Security of Medical Data Against Adversaries in Internet of Medical Things*. In 2021 5th International Conference on Electronics, Materials Engineering & Nano-Technology IEMENTech (pp. 1-6). IEEE.  Rigaud-Lacresse, E., &Pini, F. M. (Eds.). (2017). *New luxury management: creating and*  *managing sustainable value across the organization*. Springer. | | | | | | |
| **Outcomes** | **The students are able to**   * UnderstandthebettermanagerialskillsonBoutique. * Enablethestudentstounderstandtheintricaciesofretailbusiness. * Students will be able to prepare their portfolio in digital as well as other modes of presentation * Students work will be best showcased * Discuss and explain their work professionally | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Fabric Structure and Design** | **4** | **4** |
| **Objectives** | * To study about the different elements of weaving. * To gain knowledge about weave effects. * To know the special weaves and its application in textile design. * To study about the various knit structure. * To get knowledge on colour and weave effects | | | | | |
| **Unit – I** | **WOVEN DESIGN FUNDAMENTALS**  Introduction, Classification of Woven structures, Methods of weave Representation, Weave repeat, basic elements of a woven design, Types of draft plans. Weaves – Plain, Rib Twill, Satin  and Sateen. End uses of the above weaves. | | | | | |
| **Unit – II** | **HEAVY FABRICS**  Honey Comb - ordinary, brighten. Weaves – Huck a Back, Crepe and Mock Leno. End uses of the above weaves. | | | | | |
| **Unit – III** | **FIGURED FABRICS**  Backed Fabrics - Warp and Weft, Difference between warp and weft backed fabrics. Extra warp and extra weft figuring – single and two colours, Difference between extra warp and extra weft  figuring. End uses of the above weaves | | | | | |
| **Unit – IV** | **PILE FABRICS**  Pile Fabric- Types of velveteen, Weft plush, Terry pile – 3 pile, 4 pile, 5 pile, 6 pile, length density and fastness of no pile. End uses of the above weaves. | | | | | |
| **Unit – V** | **DOUBLE CLOTH**  Double Cloth- Classification, warp, Weft and centre stitched double cloth. Self-Stitched- back to  Face. End uses of the above weaves. | | | | | |
| **Reference and Textbooks:**  Grosicki, Z.J. (2018).*Watson’s Advanced Textile Design and Colour – Compound Woven Structures***.**  Cambridge: Woodhead Publishing Pvt. Ltd.  Hayavadana, (2014).*Woven Fabric Structure Design and Product Planning*. Netherland: Elsevierscience& Technology.  Ajgaonkar, B. (1998**).** *Knitting Technology***.** Mumbai: Universal Publishing Corp.  David J. Spencer. (2011).*Knitting Technology***.** New Delhi: Woodhead Publishing India Pvt Ltd. Grosicki, Z.J. (2014).*Watson’s Textile Design and Colour – Elementary Weaves and Figured*  *Fabrics.cambridge*Woodhead Publishing Pvt Ltd. | | | | | | |
| **Outcomes** | **The students get insight knowledge**   * Illustrate the elements of woven fabric design. * Develop elementary fabric structures. * About weave design. * Develop colour and weave effects. * Understand weave effects. | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Indian Traditional Textiles and Embroidery** | **6** | **6** |
| **Objectives** | * To learn the origin of costumes and study the ancient to modern time costume. * To get an idea about the Indian traditional textiles and embroideries. * To impart knowledge regarding traditional textiles of India. * To enable students to understand use of these textiles in the field of fashion. * To develop handicraft sector, increase handicraft exports and welfare of artisans. | | | | | |
| **Unit – I** | **INTRODUCTION TO INDIAN COSTUMES**  Indian costume – Introduction, Indian Costumes from the earliest times to the beginning of the historical period – Indus valley civilization costumes, Indo Aryans and Vedic Ages, Mauryan and the Sunga period, Satavahana period, Kushan period Mughal period. | | | | | |
| **Unit – II** | **TRADITIONAL COSTUMES OF INDIA**  Introduction to traditional Indian dress. Costumes of Punjab, Himachal Pradesh, Gujarat, Rajasthan, Uttar Pradesh, Madhya Pradesh, Jammu and Kashmir, Tamil Nadu, Kerala, Andhra Pradesh,, Karnataka | | | | | |
| **Unit – III** | **EMBROIDERIES OF INDIA**  Kashmir Embroidery, Kanthas of Bengal, Chambarummal of Himachal Pradesh,  Chickenkari of Uttar Pradesh, Pulkhari of Punjab, Kasuthi Embroidery, Kutch Embroidery. | | | | | |
| **Unit – IV** | **TRADITIONAL WOVEN TEXTILES**  Introduction to woven textiles of India – Brocades of Banaras, Himrus, AmrusBaluchari,  Pithambar, Tamilnadu Saree. Types of woven Kashmir shawls – Do- shala, Do- rookha, Kasubha shawl | | | | | |
| **Unit – V** | **TRADITIONAL PRINTED AND DYED TEXTILES**  Printed textiles – Kalamkari, Block printing, Roghan printing and other printed and painted textiles (Mata-mi-pachedi, Pabuji-ka-pad) Dyed textiles – Ikat, Patola, Bandhani, Laharia, Mashru. | | | | | |
| **Reference and Textbooks:**  Biswas, A. (2017). *Indian costumes*. Publications Division Ministry of Information & Broadcasting.  Kumari, P. (2021). *Innovation in Design of Traditional Mashru Textile for Product Diversification* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).  Kalaiya, V. B. (2019). *Documentation of Traditional Costomes of Rulers of Kachchh* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).  Gandhi, K. (Ed.). (2019). *Woven textiles: Principles, technologies and applications*. Woodhead Publishing.  Haq, U. N., &Ite, T. A. (2022). Exploratory Study of Textile Undergraduates' Knowledge and Perception towards Eco-Friendly Clothing in Bangladesh. *Tekstilec*, *65*(1). | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * History of costumes and garments of India. * Traditional textiles and embroideries in India. * Students will be able to differentiate between embroidery works of different states. * Students will be able to use different technique in their collections. * Students will be able to understand the problem, issues and other important conditions of craft men working on traditional textiles of different regions of India | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Organization of Garment Unit** | **6** | **6** |
| **Objectives** | * Enable student to become a successful entrepreneur / manager in the future * Impart knowledge on the organization of the various departments of a garment unit * Gain a better understanding of a trading procedure | | | | | |
| **Unit – I** | Entrepreneurship- definition, types, need for Entrepreneurs, qualities and types of Entrepreneurship. Management – Definition, Management as a process – Planning, organizing, Directing, Controlling, Co-ordination | | | | | |
| **Unit – II** | **Unit –II**  Institutions supporting entrepreneurs- DIC, NSIC, SISI, SIPCOT, TII, KVIC, CODISSIA, COMMERICAL BANKS – SBI. Organizational structure of a garment unit – Hierarchical organization, production planning and control | | | | | |
| **Unit – III** | **Unit III**  Different department in a garment unit – Design department, Finance department, purchasing department, Production department, Organizing different sections –  hierarchy Personnel involved in all the departments, nature of the job. | | | | | |
| **Unit – IV** | **Unit-IV**  Factory Design and layout – importance of factory design, factors affecting factory design, Types of buildings, (single and multi –storey) –advantages and limitation. Factory layout – Process, Product and combined layout, Design requirement | | | | | |
| **Unit – V** | **Unit-V**  Trade: Domestic trade vs. International trade - Export marketing of apparel - Major documents for exports - Export finance - Payment method - Logistics and shipping –  Export and import policy | | | | | |
| **Reference and Textbooks:**   * Dinakarpagare, *Principles of management*. Delhi: Sultan Chand and Sons. * Dr. C.B Gupta & Dr N.P. Srinivasan, (1997). *Entrepreneurship Development in India*. Delhi: Sultan Chand and Sons. * Darlie O Koshy, (1997). *Garment Exports*. * AJ Chester*,* (1998). *Introduction to clothing production management*. Wrenbury Associates Ltd Harold Carr and Barbara Latham, (1994). *The technology of clothing manufacture*. Blackwell Science. | | | | | | |
| **Outcomes** | * Interpret the meaning of entrepreneur and management * Understand the organizational structure of a garment unit * analyse the importance of factory design and its layout | | | | | |

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| **Semester – VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Fashion Business communication** | **6** | **6** |
| **Objectives** | * Impart knowledge on the underlying concepts of marketing and fashion marketing. * Familiarize with the fashion products, consumer, communications and advertising. * To study about the importance fashion business communication techniques. * To understand the different promotional skills and fashion communication. | | | | | |
| **Unit – I** | **Fashion Marketing and communication**  Introduction, components of fashion marketing communications**.** Theoretical  frameworks - communication strategies within the fashion industry, the significance of marketing communications to fashion marketing activity. | | | | | |
| **Unit – II** | **Fashion marketing process**  The process of marketing communications development, models of mass communication, the role of marketing communication in consolidating brand position and influencing consumer perception of fashion brands. Globalization of fashion communication in terms of legal, social and cultural implications | | | | | |
| **Unit – III** | **Advertising**  The role of advertising -encoding messages, advertising control bodies, creating and designing appropriate marketing communications strategies. Media planning, market research and account planning the advertising brief print advertising, editorial, photography. Creating a market position through strategic marketing communication. | | | | | |
| **Unit – IV** | **Marketing promotion**  The role of communication in promoting sales - of public relations, sponsorships  and endorsements, exhibitions, tradeshows and fashion shows. The role of communication in personal selling - direct marketing and e-marketing. | | | | | |
| **Unit – V** | **International fashion marketing**  Communications, implementation and evaluation of fashion communication methods, impact of technology in fashion communication, regulatory and ethical  issues in fashion marketing communication. | | | | | |
| **Reference and Textbooks:**  Smith, P. R. & Taylor, J. (2005). *Marketing Communications - An Integrated Approach*. London:Kogan Page Publishers.  Agins, T. (2010). *The end of Fashion - How Marketing Changed the Clothing Business Forever*. New York: Harper Collins publishers.  Hines, T. & Bruce, M. (2012)*. Fashion Marketing - Contemporary Issues*. UK, Oxford: Butterworth – Heinemann  George E. Belch., Michael A. Belch. (2003). *Advertising and Promotion - An Integrated Marketing Communication Perspective.* New Delhi: Tata Mcgraw Hill India  Malcolm Barnard, (2013)*. Fashion as Communication*. London: Routledge Publishers. | | | | | | |
| **Outcomes** | * Understand the basic concepts of marketing and fashion marketing * Describe the types of fashion products and the consumer behavior interpret various marketing strategies. * Understand the significance of fashion communication. * Acquire knowledge about on international fashion marketing communication. | | | | | |

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| **Semester - VI** | | | | | | |
| **CC/** | | | **Core** | **Theory** | **C** | **H/W** |
| **Course code** | |  | **Industrial Garment Machineries and**  **Equipment’s** | **6** | **6** |
| **Objectives** | * To understand special attachments of the industrial sewing machineries for high productivity * Various equipments used in layout, ironing and packing in the garment manufacturing unit. * To understand the importance of machineries and technology in garment construction. * To study the different types of machines and stitch standards followed in industry. | | | | | |
| **Unit – I** | **Departments in Apparel manufacturing Unit:**  Merchandising, Human Resource, Industrial Engineering, Accountancy, Security, Electrical, Machine Maintenance, Accessory Stores, Fabric, Pattern making & Sampling, Cutting/Layout Sewing, Finishing, Quality Control, Packing, Final Inspection and Shipment**.** | | | | | |
| **Unit – II** | **Garment industry machineries**  Types of Machineries involved garment manufacturing sector or Industry. General machineries   * Cutting machineries * Sewing machineries, * Finishing machineries. | | | | | |
| **Unit – III** | **Special attachments:**  Garment industry used some special attachment for high productivity. There are listed below Guide attachments and Position attachments. | | | | | |
| **Unit – IV** | **Machine Layout**  Stitching operation wise layout and machineries used for shirt manufacturing, Trouser, T-shirt. | | | | | |
| **Unit – V** | **Fusing and pressing equipment**  After garment making following machine and equipment used for fold the garment   * Fusing machine * Ironing machine * Pressing Equipment * Sucking machine | | | | | |
| **ReferenceandTextBooks:-**  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Vilumsone-Nemes, I. (2018). *Industrial cutting of textile materials*. Woodhead Publishing.  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Richter, G., Raban, D. R., &Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for Crowd*  *Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., &Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel and protective clothing*. CRC Press.  Paula, A. (2021). *Gendered Capitalism: Sewing Machines and Multinational Business in Spain and Mexico,*  *1850-1940*. Routledge. | | | | | | |
| **Outcomes** | * Identify the industrial machineries involved in various garment process * Classify the special attachments of the industrial sewing machineries for high productivity * State the various equipments used in ironing and packing in the garment manufacturing unit. | | | | | |

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| **Semester – I** | | | | | | |
| **CC** | | | **Allied** | **Theory** | **C** | **H/W** |
| **Allied** | |  | **Theory-IA Fashion and Apparel Designing** | **3** | **3** |
| **Objectives** | * Tounderstandtheelementsandprinciplesofdesignandapplyitwithgarmentdesign. * Tostudythewardrobeplanningandfigureirregularitiesanddesigngarment accordingtothespecificneed. * To understand the fashion concepts and scope of fashion industry. * To know the basic principles of designing. * To Design the suitable garments for unusual figure | | | | | |
| **Unit – I** | Fashion terminology: Fashion, style, design, trend, fad, classic, collection, chic, mannequin,  fashion show, trend, high fashion, haute couture, forecasting and fashion cycle. | | | | | |
| **Unit – II** | Design- definition and types – structural and decorative design, requirements of a good structural and decorative design. Elements of design line, shape, colour, size, and texture. Applications of  structural and decorative designs | | | | | |
| **Unit – III** | Principles of design- balance –formal and informal, rhythm- through repetition, radiation and  gradation, emphasis, harmony, and proportion. Application of principles of design in a dress | | | | | |
| **Unit – IV** | Colour- definition, colour theories- prang colour chart and Munsell colour system, Dimensions of  colour- hue, value, and intensity. Standard colour harmonies- application in dress design. Psychology of Colours | | | | | |
| **Unit – V** | Silhouettes and figure types-pear figure, hourglass figure, rectangular figure, wedge figure, overall roundness figure. Choosing the best dress for the figure types. Factors influencing design  application for different age group, occasions and seasons. | | | | | |
| **Reference and Textbooks:**  MacDonald, N. M. (2009). *Principles of flat pattern design 4th edition*. Bloomsbury Publishing USA. Calderin, J., &Volpintesta, L. (2013). *The Fashion Design Reference & Specification Book: Everything Fashion Designers Need to Know Every Day*. Rockport Pub.  Celhay, F., Magnier, L., &Schoormans, J. (2020). Hip and authentic. Defining neo-retro style in package design. *International Journal of Design*, *14*(1), 35-49.  Samara, T. (2020). *Design Elements: Understanding the rules and knowing when to break them-A Visual Communication Manual*. Rockport publishers.  Brown, B. (2001). Fashion Accessories:: The Complete 20th Century Sourcebook. *Reference Reviews*. Michael, O. (2020). PTSD and female sexuality in the aftermath of childhood and adolescent sexual abuse in  Una’s Becoming Unbecoming. *Journal of Graphic Novels and Comics*, *11*(4), 394-411. | | | | | | |
| **Outcomes** | * Learnelementsandprinciplesofdesignanditsapplicationingarmentdesign. * Understandthetypeoftrimsanddecoratedaccessoriesusedingarment embellishment. * Gain knowledge on key designing principles. * Exploring the knowledge on figure types. * Students will be able to know about the national and international designers. | | | | | |

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| **Semester – I** | | | | | | |
| **CC/** | | | **Allied** | **Practical** | **C** | **H/W** |
| **Allied** | |  | **Practical-IA – Fashion and Apparel Designing** | **2** | **2** |
| **Objectives** | * Impart skills in drawing and coloring * Illustrate sketches for children, women, and man * Create sketches the different perspectives of the parts of the body and face * To study about the basics of drawing. * To gain knowledge about shading techniques. | | | | | |
| 1. Illustrate the Following Children’s Garments Bib   Baba suit Frocks   1. Illustrate the Following Women’s Garments Skirts   Ladies tops Salwar Kameez Maxi/ Gown   1. Illustrate the Following Men’s Garments T-Shirts   Shirts Pants Kurta  Pyjama | | | | | | |
| **Outcomes** | * Illustrate garment designs for children, woman and man. * Sketch the parts of the body in various perspectives * Sketch the face of male and female in different views * Gain knowledge on basic drawing principles. * Understand the shading techniques. | | | | | |

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| **Semester – II** | | | | | | |
| **CC/** | | | **Allied** | **Theory** | **C** | **H/W** |
| **Allied** | |  | **Theory–IB – Basic Sewing Techniques** | **3** | **3** |
| **Objectives** | * Tostudyaboutsewingmachineparts functionsandits applications. * To impart knowledge of machines and tools used for sewing * To learn about the various garment details and the way they are attached to finish a garment * To learn different types of finishing in garment construction. * To teach the basics of the functions of the sewing and the essential tools. | | | | | |
| **Unit – I** | Parts and functions of a single needle machine, essential tools – cutting tools, measuring tools, marking tools, embroidery tools, general tools, pressing tools,  Body measurement – importance, Method of taking measurements for ladies and men. | | | | | |
| **Unit – II** | Seams: Definition, types of seams and seam finishes,  Fullness: Definition, Types of fullness – Darts, Tucks, Pleats, flares, godets, gathers, shirrs & frills. Calculating material requirements | | | | | |
| **Unit – III** | Sleeves – definition, types, set-in-sleeves – plain sleeve, puff sleeve, bishop sleeve, bell, circular. Modified armhole – squared armhole. Cap sleeve and Magyar sleeve. Sleeve and bodice combined –  raglan, kimono and dolman | | | | | |
| **Unit – IV** | Collars – definitions, types, peter pan, scalloped, puritan, sailor, square, rippled, full shirt collar.  Yokes – types, simple yoke, yoke with fullness within the yoke, yoke supporting/ releasing fullness. | | | | | |
| **Unit – V** | Pockets - Definition, classification, selection of pocket and creating variety in pockets. Plackets -  Definition, characteristics of a good placket, classification – continuous bound, bound & faced, fly opening, zipper, tailored and center front / shirt placket. | | | | | |
| **Reference and Textbooks:**  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Vilumsone-Nemes, I. (2018). *Industrial cutting of textile materials*. Woodhead Publishing.  Nayak, R., &Padhye, R. (Eds.). (2017). *Automation in garment manufacturing*. Woodhead Publishing. Richter, G., Raban, D. R., &Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for Crowd*  *Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., &Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel and protective clothing*. CRC Press.  Paula, A. (2021). *Gendered Capitalism: Sewing Machines and Multinational Business in Spain and Mexico, 1850-1940*. Routledge. | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * Garment industry production process and its management process. * Familiarize the different types of machines and special attachments adopted in garment industry. * Basic understanding of garments, machines and their use in apparel and fashion industry * Students will be able to know about the special attachments and their functions. * Students will develop an understanding of how different constructional tools help to make a perfect garment. | | | | | |

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| **Semester – II** | | | | | | |
| **CC/** | | | **Allied** | **Practical** | **C** | **H/W** |
| **Allied** | |  | **Practical-IB – Basic sewing Techniques Lab** | **2** | **4** |
| **Objectives** | * Impart sewing skills in creating garment components. * To stitch the basic samples of collar, pocket, sleeve etc. * Students will be able to learn seam and seam finishes that have to be given to different fabrics. * Develop skills of students to create basic garment parts and various design elements required for a garment. * To make student understand the basic skills related to hand stitches and seams. | | | | | |
| Preparation Samples for the Following   1. Seams – Plain seam, top stitched seam, flat fell seam, piped seam, lapped seam 2. Seam Finishes – double stitch, edge stitched. 3. Hems – narrow, stitched and turned, hems for circular shape 4. Darts – single and double 5. Tucks – Pin tuck, cross tuck, group tucking 6. Neckline Finishes – Bias facing, Bias binding and Shaped facing 7. Plackets – continuous placket, bound placket and faced placket, zipper placket, tailored placket 8. Fasteners – Press buttons, Hook and eye, Button and Button hole 9. Pocket – Patch pocket, side seam pocket, bound and faced pocket 10. Skirt – pleated skirt, gathered skirt, circular skirt 11. Sleeve – Plain sleeve, Magyar Sleeve, Raglon Sleeve 12. Collar - Flat collar(any type), Open collar 13. Simple Yoke | | | | | | |
| **Reference and Textbooks:**  Richter, G., Raban, D. R., &Rafaeli, S. (2018, August). *Tailoring a Points Scoring Mechanism for Crowd Based Knowledge Pooling*. In Proceedings of the 51st Hawaii International Conference on System Sciences.  Nayak, R., &Ratnapandian, S. (2018). *Care and maintenance of textile products including apparel and protective clothing*. CRC Press.  Paula, A. (2021). *Gendered Capitalism: Sewing Machines and Multinational Business in Spain and Mexico, 1850-1940*. Routledge.  Practical Clothing Construction – Part I, Mary Mathews, Cosmic Press, Chennai, 1986. Practical Clothing Construction – Part II, Mary Mathews, Cosmic Press, Chennai, 1986. Zarapker system of cutting –Zarapker. K. R., Navneet publications Ltd ,1994  Sewing and Knitting – A Readers Digest, Step -by -Step Guide, Readers Digest Pvt Ltd, Australia, 1993. | | | | | | |
| **Outcomes** | The students will be able to   * Develop samples for seams, seam finishes and hems. * Create samples for fullness, neckline finishes, skirt, sleeve, collars and yoke. * Basic stitching and creative skill will be developed which will help them to construct their garments * Use different stitches and seams as per the requirement of the garment. * Convert fullness of garment with different techniques like dart, pleats etc. | | | | | |

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| **Semester - III** | | | | | | |
| **CC/** | | | **Allied** | **Theory** | **C** | **H/W** |
| **Allied** | |  | **Theory–IIA – Dyeing and printing** | **3** | **3** |
| **Objectives** | * To study the fabric preparatory process in textile processing industry. * To impart knowledge in the field of pre-processing, processing and post-processing of textile substrate. * To educate students about textile dyeing and printing * To make them understand various textile finishes. * To introduce different methods and materials of dyeing and printing. | | | | | |
| **Unit 1** | Water hardness – Definition and types - Quality required for wet processing industries - Softening  process, Preparatory process sequence for woven and knitted fabrics. | | | | | |
| **Unit II** | Preparatory process: Need – Desizing: objectives, types and continuous enzyme desizing process  – Scouring: objectives, method and pressure scouring Process - Bleaching: objectives, types of bleaching agents, Hydrogen peroxide bleaching using J-box and its advantages and disadvantages | | | | | |
| **Unit III** | Dyeing: classification of dyes, methods of dyeing, stages of dyeing - Basic dye, Direct, Reactive,  Vat, Disperse, and Naphthol , Natural dyes- types, Advantages and Disadvantages. | | | | | |
| **Unit IV** | Printing: types, methods of printing, dye paste preparation, after treatment. Direct printing: Block,  Stencil, screen, roller printing, duplex printing and transfer printing - Discharge printing - Resist printing: Batik, Tie and dye | | | | | |
| **Unit V** | Finishing- objectives of finishing, temporary and permanent finish. Methods – chemical and  mechanical finish. Calendaring, tentering and stiffening. | | | | | |
| **ReferenceandTextBooks:-**  Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Muthu, S. S. (Ed.). (2018). *Circular Economy in Textiles and Apparel: Processing, Manufacturing, and Design*. Woodhead publishing.  Mahapatra, N. (2018). Textile Dyes. *Journal of Textile and Clothing Science*, *1*(1), 01-02.  Panda, H. (2013). *A concise guide on textile dyes, pigments and dye intermediates with textile printing technology*. Niir Project Consultancy Services.  Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Vankar, P. S. (2017). *Natural dyes for textiles: Sources, chemistry and applications*. Woodhead Publishing. | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * Dyeing and printing methods and principles of colour application. * Develop knowledge in textile and garment processing sector. * Obtain knowledge on chemical processing of cotton and blended materials. * Analyze the parameters and categorize the recipes for chemical processing of textile materials. * Categorize and select the appropriate techniques to process the yarn and fabrics. | | | | | |

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| **Semester – III** | | | | | | | |
| **CC/** | | | | **Allied** | **Practical** | **C** | **H/W** |
| **Allied** | | |  | **Practical-IIA Dyeing and Printing** | **2** | **4** |
| **Objectives** | * To understand the preparatory process of textile materials. * To learn about the dyeing and printing methods of different textile fabric materials. * Pretreatment- Scouring, Desizing, Mercerizing of cotton * Dyeing of cotton, silk, wool and synthetic textiles using - Direct, Vat, Sulphur, Reactive, Acid, Basic and Disperse dyes. * Printing of cotton using block and screen printing. | | | | | | |
| 1. Preparation of samples for processing – Desizing. 2. Preparation of samples for processing – Scouring. 3. Preparation of samples for processing – Bleaching. 4. Preparation of samples for processing – Mercerizing. 5. Dyeing of fabric with direct and Reactive dyes. 6. Dyeing of fabric with acid and basic dyes. 7. Dyeing of fabric with Disperse dyes. 8. Print the sample with Stencil. | | | | | | | |
| **Reference and Textbooks:**  Mahapatra, N. (2018). Textile Dyes. *Journal of Textile and Clothing Science*, *1*(1), 01-02.  Panda, H. (2013). *A concise guide on textile dyes, pigments and dye intermediates with textile printing technology*. Niir Project Consultancy Services.  Uddin, F. (2019). Introductory chapter: textile manufacturing processes. In *Textile manufacturing processes*.  IntechOpen.  Vankar, P. S. (2017). *Natural dyes for textiles: Sources, chemistry and applications*. Woodhead Publishing. | | | | | | | |
| **Outcomes** | | **The students are able to**   * Able to analyze the colourfastness, washing and shrinkage test of dyed fabric. * Understand the process of desizing bleaching, dyeing and printing the fabric with different chemicals and colorants. * Students will be able to use the techniques for developing different products. * Exploring and applying the old and new ideas of designing in different sector. * Understand the different types of printing techniques. | | | | | |

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| **Semester – IV** | | | | | | |
| **CC/** | | | **Allied** | **Theory** | **C** | **H/W** |
| **Allied** | |  | **Theory– IIB – Fabric embellishment** | **3** | **3** |
| **Objectives** | * To learn the origin of costumes and study the ancient to modern time costume. * To get an idea about the Indian traditional textiles and embroideries. * To impart knowledge regarding traditional textiles of India. * To enable students to understand use of these textiles in the field of fashion. * To develop handicraft sector, increase handicraft exports and welfare of artisans. | | | | | |
| **Unit 1** | **INTRODUCTION TO INDIAN COSTUMES**  Indian costume – Introduction, Indian Costumes from the earliest times to the beginning of the historical period – Indus valley civilization costumes, Indo Aryans and Vedic Ages, Mauryan and  the Sunga period | | | | | |
| **Unit II** | **TRADITIONAL COSTUMES OF INDIA**  Introduction to traditional Indian dress. Costumes of Punjab, Himachal Pradesh, Gujarat,  Rajasthan, Uttar Pradesh, Madhya Pradesh, Jammu and Kashmir, Tamil Nadu, Kerala, Andhra Pradesh,, Karnataka | | | | | |
| **Unit III** | **EMBROIDERIES OF INDIA**  Kashmir Embroidery, Kanthas of Bengal, Chambarummal of Himachal Pradesh, Chickankari of Uttar Pradesh, Pulkhari of Punjab, Kasuthi Embroidery, Kutch Embroidery. | | | | | |
| **Unit IV** | **TRADITIONAL WOVEN TEXTILES**  Introduction to woven textiles of India – Brocades of Banaras, Himrus, AmrusBaluchari, Pithambar, Tamilnadu Saree. | | | | | |
| **Unit V** | **TRADITIONAL PRINTED AND DYED TEXTILES**  Printed textiles – Kalamkari, Block printing, Roghan printing and other printed and painted textiles (Mata-mi-pachedi, Pabuji-ka-pad) | | | | | |
| **ReferenceandTextBooks:-**  Biswas, A. (2017). *Indian costumes*. Publications Division Ministry of Information & Broadcasting.  Kumari, P. (2021). *Innovation in Design of Traditional Mashru Textile for Product Diversification* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).  Kalaiya, V. B. (2019). *Documentation of Traditional Costomes of Rulers of Kachchh* (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).  Gandhi, K. (Ed.). (2019). *Woven textiles: Principles, technologies and applications*. Woodhead Publishing.  Haq, U. N., &Ite, T. A. (2022). Exploratory Study of Textile Undergraduates' Knowledge and Perception towards Eco-Friendly Clothing in Bangladesh. *Tekstilec*, *65*(1). | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * HistoryofcostumesandgarmentsofIndia. * TraditionaltextilesandembroideriesinIndia. * Students will be able to differentiate between embroidery works of different states. * Students will be able to use different technique in their collections. * Students will be able to understand the problem, issues and other important conditions of craft men working on traditional textiles of different regions of India | | | | | |

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| **Semester - IV** | | | | | | |
| **CC/** | | | **Allied** | **Practical** | **C** | **H/W** |
| **Allied** | |  | **Practical-IIB Fabric Embellishment** | **2** | **4** |
| **Objectives** | * Inherit embroidery skills by hand and machine * Appreciate the beauty and intricacies of the traditional embroideries of India * Enhance creativity with the application of smocking * To teach and train the students in the basics of hand and machine embroidery. * To impart knowledge on various types of embroidery stitches. * To make them to acquire skills essential to evaluate the performance of accessories | | | | | |
| Prepare the following embroidery samples   1. Whipped Running Stitch, 2. Threaded Running Stitch 3. Whipped Back Stitch 4. Threaded Back Stitch 5. Hemming 6. Chain stitch and its types 7. Fern Stitch 8. Stem Stitch 9. Lazy Daisy Stitch 10. Blanket 11. Button Hole Stitch 12. Satin 13. French Knot, 14. Bullion Knot 15. Feather – Double Feather Stitch, 16. Closed Feather Stitch 17. Herring bone 18. Cross Stitch 19. Bead work 20. Sequin work | | | | | | |
| **Reference and Textbooks:**   * Shailaja D Naik , Traditional Embroideries of India, APH Publishing, 1996 * Megan Eckman, Everyday Embroidery for Modern Stitchers, C&T Publishing, 2020 * Libby Moore, Thread Folk: A Modern Makers Book of Embroidery Projects and Artist Collaborations, Paige Tate & Co, 2019 | | | | | | |
| **Outcomes** | **The students gain knowledge in**   * Apply the techniques used in the Indian traditional embroideries * Design and develop samples for drawn thread embroidery * Attain knowledge on the embroidery tools and the techniques. * Identify the different hand embroidery stitches and Indian traditional embroidery. * Thorough understanding of the different accessories and embellishments. | | | | | |