



GUJARAT TECHNOLOGICAL UNIVERSITY

Bachelor of Design Syllabus (Design/Textile Design)

Subject Code: 1130201

Subject Name: Fiber to Fabric

| | |
|-------------------------|---------|
| WEF Academic Year: | 2024-25 |
| Semester: | 3 |
| Category of the course: | Core |

| | |
|-----------------------|---|
| Prerequisite : | |
| Rationale : | Understanding of textile with its various segments. Develop knowledge of different terminology used in textile. Develop knowledge of various yarn types and its properties. |

Course Scheme:

| Teaching Scheme | | | Total Credits | Assessment Pattern and Marks | | | | Total Marks |
|-----------------|---|----|---------------|------------------------------|-------|-----------|--------|-------------|
| L | T | PR | C | Theory | | Practical | | |
| | | | | ESE (E) | PA(M) | ESE (V) | PA (I) | |
| 4 | 0 | 0 | 4 | 70 | 30 | 30 | 20 | 150 |

Course Content:

| Sr. No. | Course Content | No. of Hours | % of Weightage |
|---------|--|--------------|----------------|
| 1 | UNIT 1: Introduction to Fibers and filaments. Classification of fibers. To learn what is fiber, their properties, and classification. Understanding of sources of natural fibers and filaments and process of getting it clean. Learn about the Primary and secondary property of fibers and filaments. What are the synthetic fibers and its process? | 10 | 20 |
| 2 | UNIT 2: Introduction to Yarn Understand the spinning process to make filament yarn. Types of yarns and additional property given to yarn for suitable purpose. Its end uses. | 10 | 20 |
| 3 | UNIT 3: Introduction to Fabric and its finishes. Methods of making fabrics from fibers and yarn. What is weaving, knitting and felting? Basic finishes and understanding of finishing i.e. ironing, bleaching, coloring, shining etc. | 10 | 20 |
| 4 | UNIT 4: Fiber, Yarn Identification Performing test to identify the fibers by microscopic view, soluble test and | 10 | 20 |



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| | | | |
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| | burning test of all natural and synthetic fibers and yarn, | | |
| 5 | UNIT 5: Swatch file making. Making swatch book for understanding the weave count and methods of fabric. Also learn count system and GSM and PPI and EPI. | 16 | 20 |
| | Total | 56 | 100 |

Reference Book:

Title: Textiles

Author: Kadolph

Title: Fabric Sciences

Author: Pizzuto

Course Outcome:

After Completion of the Course, Student will able to:

| No | Course Outcomes | RBT Level* |
|----|--|------------|
| 01 | Establish understanding about textile from yarn to fabric. | |
| 02 | Help students to identify the fibers by performing test. | |

*RM: Remember, UN: Understand, AP: Apply, AN: Analyze, EL: Evaluate, CR: Create

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