

TAX4560 Woven Fabric Technology

Level	4
Course Code	TAX4560
Course Title	Woven Fabric Technology
Credit value	5
Core/Optional	Core (Textile and Clothing)
Prerequisites	15 credits (P)
Course Aim/s	To provide the technical knowledge in warp & weft preparation processes and fabric weaving.
Course Learning Outcomes (CLO):	<p>At the completion of course, student should be able to:</p> <p>CLO1: Determine the structural parameters and the requirements of warp and weft yarns of woven fabrics</p> <p>CLO2: Select appropriate weaving preparatory machines and methods to prepare warp/ weft yarns according to the final fabric requirement.</p> <p>CLO3: Select appropriate sizing recipe and machinery to meet optimal requirements.</p> <p>CLO4: Produce warp and weft yarn packages of highest quality to ensure economical weaving and good quality fabrics.</p> <p>CLO5: Identify different types of weaving machine mechanisms and select weaving machines and accessories of appropriate technology and optimize their settings to weave different fabrics.</p> <p>CLO6: Carry out warp entering/tying employing most suitable technology/methods.</p> <p>CLO7: Analyse the causes for quality issues of woven fabrics and suggest remedial actions.</p> <p>CLO8: Identify any malfunctioning machines, mechanisms and equipment and take the steps to rectify them.</p>
Content	<p>Outline Syllabus:</p> <p>Unit1: Introduction to Weaving</p> <p>Unit 2: Weaving Preparation I - Winding</p> <p>Unit 3: Weaving Preparation II – Warp Preparation</p> <p>Unit 4: Basics of Weaving</p> <p>Unit 5: Detailed Studies of Shedding</p> <p>Unit 6: Detailed Studies of Picking</p> <p>Unit 7: Beat-up Mechanisms and Secondary Motions</p> <p>Unit 8: Loom Monitoring and Automation</p>