

TAX6263 Textile Product Engineering

Level	6
Course Code	TAX6263
Course Title	Textile Product Engineering
Credit value	2
Core/Optional	Elective (Textile and Clothing)
Course Aim/s	To provide the necessary knowledge to design and develop textile products considering environmental and ethical aspects.
Course Learning Outcomes (CLO):	<p>After completing the course, student should be able to:</p> <p>CLO1: Explain the basic concepts and main stages of designing and developing a new product.</p> <p>CLO2: Predict the expansion possibilities of a business to match with strategic plan of the company, based on the outcome of the SWOT analysis.</p> <p>CLO3: Plan a new product or develop an existing product based on the market analysis.</p> <p>CLO4: Explain the fundamentals and principles involved in developing a product concept.</p> <p>CLO5: Select the most important product attributes from a market survey and develop a product concept based on the cost benefit analysis.</p> <p>CLO6: Develop and evaluate a design proposal based on selected product concept.</p> <p>CLO7: Improve the value of a product using value analysis or value engineering techniques.</p> <p>CLO8: Transfer customer requirements into technical aspects and develop an affordable product through cost effective techniques.</p> <p>CLO9: Manage the possible risks involved in product engineering.</p> <p>CLO10: Design and develop green products using ethical principles.</p>
Content	<p>Outline Syllabus:</p> <p>Unit 1: Principles of Product Engineering I This unit covers the areas of Product Development, Product Planning, Product Concept, Product Concept-Selection of attributes, Design Phase and Evaluation of Design</p> <p>Unit 2: Principles of Product Engineering II This unit covers the areas of Value Engineering, Function Analysis System Technique, Economics and Product Development, Risk Management in Product Engineering, Ethics in Engineering Design and Environmental Issues in Product Engineering</p>