Materials & Technology (Textiles):

Unit 1: Design modification and production

This unit focuses on the tools, processes, techniques, knowledge and skills the designer has used to develop a solution to a problem. Students investigate methods and processes used by the designer to examine the need and define the problem by generating an appropriate design brief. They consider methods and information the designer uses to generate and communicate ideas and determine the suitability of appropriate materials and processes. Students learn about the production techniques used to make the product and how it is evaluated against the needs and requirements outlined in the design brief.

Using this process as a model, the student modifies the design of a similar product. Consideration is given to protection of intellectual property implications related to design.

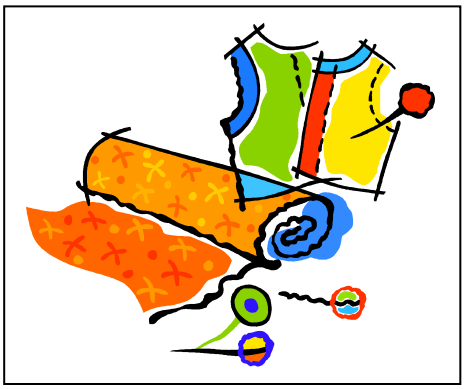
Unit 2: Collaborative design

In this unit, the student works both individually and as a member of a small design team to address a problem, need or opportunity that requires a product within a product range or based on a theme, or component of a group product. This provides the student with the opportunity to work with others while taking responsibility for particular aspects of the design and production processes.

Unit 3: Design, technological innovation and manufacture

In this unit, students investigate a client or end-user's needs, prepare a design brief, devise evaluation criteria, carry out research and propose a series of design options. They justify the choice of a preferred design option and develop a work plan, and commence production of the product, which will be completed and evaluated in Unit 4.

This unit also examines how a range of factors influence the design and development of products within industrial/commercial settings.

Unit 4: Product development, evaluation and promotion

Students continue to develop and manufacture the product designed in Unit 3, Outcome 3, and record the production processes and modifications to the work plan and product. They evaluate the effectiveness and efficiency of techniques they used and the quality of their product with reference to evaluation criteria. Students make judgments about possible improvements. They promote their work by highlighting the product's features to the client and/or end-user.