DESIGN & TECHNOLOGY:

Design & Technology encourages students to increase their knowledge and understanding of materials and production processes required to design and make products suitable for an intended purpose.

Design & Technology 1
This unit focuses on the properties of materials, the selection of materials for the construction of products, appropriate use of tools and equipment and the various forms of communicating ideas in the designing of products.

Areas of Study
1. Properties and uses of materials
   The appropriate selection and uses of materials is fundamental to designing and making products. By examining the origins and properties of an extensive range of materials, an informed decision about their uses and applications in a variety of situations is possible.

2. Methods of communicating ideas
   A range of communication techniques to assist in the design of products is explored.

3. Production Processes
   This area of study examines the processes employed to manipulate materials.

Outcomes
For this unit students are required to demonstrate achievement of three outcomes.
Outcome 1
Explain the origins and properties of a range of materials
Outcome 2
Use a range of media and techniques to communicate design ideas
Outcome 3
Select and safely use tools and equipment to make products

Design & Technology 2
This unit focuses on the origins of products, considerations and constraints that may influence the design of products and the impact of these product solutions.

Outcome 1
Identify and investigate a problem at school and propose possible design options
Outcome 2
Investigate and research a material used to make a product in a commercial setting
Outcome 3
Design, implement and evaluate a solution to a particular design problem

Design & Technology 3
This unit focuses on the design and development of a product for a client. Students will study the role of the designer, methods of establishing needs when designing for others and examining the development of products within industrial and commercial settings.

Outcome 1
Explain the role of a designer
Outcome 2
Explain how products are designed and produced in a commercial setting
Outcome 3
Develop a product for a client

Design & Technology 4
This unit focuses on product quality, usefulness and appeal. Students will study product success I failure in terms of product promotion and methods of marketing, such as display, packaging and advertising.

Outcome 1
Explain the relationship between aesthetic appeal, function of products and user needs
Outcome 2
Explain the role of marketing in design and product development
Outcome 3
Evaluate the outcome of the design and production activities in relation to the client’s needs