**DESIGN AND MANUFACTURE NATIONAL 5**

**CONTENT**

The Course provides a broad practical introduction to design, materials and manufacturing processes. It provides opportunities for learners to gain skills in both designing and in communicating design proposals. It allows learners to explore the properties and uses of materials and to make models and prototypes of products.

**Design and Manufacture: Design**

This Unit covers the product design process from brief to resolved design proposals, including specification. It helps learners develop skills in initiating, developing, articulating and communicating design proposals. It allows them to develop an appreciation of design concepts and the various factors that influence the design of products.

**Design and Manufacture: Materials and Manufacturing**

This Unit covers the product design process from design proposals to prototype or product. It helps learners to ‘close the design loop’ by manufacturing their design ideas. It allows learners to develop practical skills that are invaluable in the design/make/test process. It helps them gain an appreciation of the properties and uses of materials as well as a range of manufacturing processes and techniques. It allows them to evaluate, refine and resolve design and manufacturing solutions.

**ASSESSMENT**

**Course assessment:**

Component 1 – Assignment. A coursework based design and manufacture project on a topic set by the SQA worth 100 marks.

Component 2 – Question paper. An external exam set by the SQA worth 80 marks.

**HOMEWORK**

Homework will be distributed regularly (mostly weekly) averaging about 30 minutes per week. Homework will be handed out at least one week before it is due in, to give pupils the opportunity to analyse the task and clarify any queries.

**ENTRY REQUIREMENTS**

Entry to the National 5 course is open to students who have a National 4 in Design and Manufacture or Art and Design.