**DESIGN AND MANUFACTURE HIGHER**

**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 processes of product design from brief to resolved design proposals and specification. It helps learners develop skills in initiating, developing, articulating and communicating design proposals for products. It allows them to gain skills and experience in evaluating design proposals in order to refine, improve and resolve them. It allows them to develop an appreciation of design concepts and the various factors that influence the design and manufacture of products.

**Design and Manufacture: Materials and Manufacturing**

This Unit covers the processes of product design from design proposals to prototype. It allows learners to gain skills in planning and making models and prototypes. It helps learners to ‘close the design loop’ by manufacturing a set of design ideas. It allows them to develop an appreciation of manufacturing practicalities. It allows them to strengthen an appreciation of the various factors that influence the design and manufacture of products. It allows learners to consider the manufacturing techniques and processes that would apply to a design proposal in a industrial/commercial context.

**ASSESSMENT**

**Course units:**

All units are internally assessed on a pass/fail basis. These assessments may be on a unit-by-unit approach or by using a combined 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 100 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 Higher course is open to students who have a National 5 in Design and Manufacture or Art and Design. However students who achieve less that a B pass at National 5 will need to be prepared for the step up in knowledge and design work needed to do well in Higher.