

Design and Manufacture

Advanced Higher

Recommended Entry Requirements

A or B at
Higher
Design and
Manufacture

The course will support learners with a deep interest in designing and manufacturing.

Progression through Design and Manufacture

This Course or its units may provide progression to:

- a range of design and/or manufacturing-related Higher National Diplomas (HNDs)
- degrees in design and/or manufacturing-related disciplines
- careers in design and/or manufacturing design fields

Course Content

The Advanced Higher Design and Manufacture Course will allow learners to explore the multi-faceted world of product design and manufacturing in an increasingly commercial and industrialised context. The course focuses on creativity and innovation in the contexts of product design and manufacture. Learners will have opportunities to make good use of their knowledge and skills already obtained across their learning experiences, for example drawing on numeracy and science when considering technical details and operational principles, and on aspects of social sciences when considering aspects of environmentalism and ethics, as well as other areas of the curriculum, personal experiences and interests. It is in this integrative quality that the Course demonstrates broad options, possibilities and flexibility in supporting personal growth. The challenges and activities for learning in the Course encourage learners to become successful, responsible and creative in their use of design and manufacturing skills and technologies, and to continue to acquire and develop the attributes and capabilities of the four capacities, including: creativity, flexibility and adaptability; enthusiasm and a willingness to learn; perseverance, independence and resilience; responsibility and reliability; and confidence and enterprise. In addition, a Course of this nature should prepare the learner to be able to understand the effects of design and manufacturing decisions, and promote self-awareness and responsibilities in environmental stewardship. Through these challenges and activities, learners should find learning an enjoyable and engaging experience.

Skills Developed

The aims of the Course are to enable learners to:

- develop understanding and skills in the processes of designing for the manufacture of products in commercial and industrial contexts
- develop and apply an understanding of the factors which influence thinking for product design and manufacturing activities
- develop a critical and visual awareness associated with requirements for user interface and product detailing
- develop independence in learning and enquiry skills in the context of problem solving in designing and manufacturing
- develop economic, social and environmental awareness of the implications of a product's design through its life cycle.

Assessment

Exam Paper

2 hours, 15 minutes, 80 marks, externally assessed

Assignment Task

120 marks, externally assessed

Passing the course equates to one level 7 qualification (32 SCQF credit points).

Related Careers

Possible career routes for pupils include Product Designer (e.g. electronics, auto-motives, communications), Interior designer, Manufacturing apprenticeships, Design Engineering, Architecture, Quantity Surveying & Industrial Design.

As well as being celebrities, Kourtney Kardashian, Blake Lively, Laurence Llewelyn-Bowen and Peter Capaldi all have careers associated with Design and Manufacture!

