



Design & Technology – Senior Phase Course Overview

Design & Manufacture

National 5 Design and Manufacture (SCQF Level 5)

Entry requirements: BGE D+M direct entry

Course Summary:

The National 5 Design and Manufacture course allows candidates to develop knowledge and skills enabling them to appreciate, contribute and adapt to the diverse opportunities offered in manufacturing industries. Candidates develop creative and practical skills by designing and making solutions to real problems. In addition, they gain an understanding of the impact of design and manufacture on everyday life. The course encourages candidates to take a broad view of design and manufacture, through making decisions and taking responsibility for their own actions, generating and developing ideas, applying knowledge, and justifying decisions. These transferrable skills place candidates in a strong position regardless of the career path they choose.

Assessment:

Component	Marks	Duration
Component 1: question paper	80	1 hour and 45 minutes
Component 2: assignment — design	55	See course assessment section
Component 3: assignment — practical	45	See course assessment section

Progression: A pass at National 5 could lead to Higher Design and Manufacture

Higher Design and Manufacture (SCQF Level 6)

Entry requirements: Design and Manufacture National 5, National 5 English, National 5 Art

Course Summary:

This course allows candidates to develop the knowledge and skills they need to appreciate design and manufacturing industries, and to contribute and adapt to the opportunities they offer. Candidates develop knowledge of design and commercial manufacture together with the creative and practical skills required to design solutions to real problems. Candidates also gain an understanding of the impact of design and commercial manufacture on everyday life and the environment. The course encourages candidates to take a broad view of design and manufacture. They do this by making decisions and taking responsibility for their own actions, generating and developing ideas, applying knowledge, and justifying decisions. These transferrable skills place candidates in a strong position regardless of the career path they choose.

Assessment:

Component	Marks	Duration
Component 1: question paper	80	2 hours and 15 minutes
Component 2: assignment	90	see 'Course assessment' section

Progression: A pass at Higher Design & Manufacture can support applications for a range of College and University courses.

Practical Woodworking**National 5 Practical Woodworking (SCQF Level 5)**

Entry requirements: BGE Practical woodworking direct entry or as a new course in S5 or S6 with an interest in the subject.

Course Summary:

The National 5 Practical Woodworking course provides a broad introduction to practical woodworking. It is largely workshop-based, combining elements of theory and practical woodworking techniques. Candidates develop practical psychomotor skills (manual dexterity and control) in a universally popular practical craft. They are introduced to safe working practices and become proactive in matters of health and safety. They learn how to use a range of tools, equipment and materials safely and correctly. Candidates develop skills in reading drawings and diagrams, measuring and marking out, cutting, shaping and finishing materials. They learn how to work effectively alongside others in a shared workshop environment. Course activities also provide opportunities to build self-confidence and to enhance skills in numeracy, thinking, planning, organising and communicating — these are all valuable skills for learning, for life and for work. The course encourages candidates to become responsible and creative in their use of technologies and to develop attributes such as flexibility, enthusiasm, perseverance, reliability and confidence.

Assessment:

Pupils will be assessed through a practical activity that involves producing a finished product in wood to a given standard and is worth 100% of their overall mark. The task will be sufficiently open and flexible to allow for personalisation and choice, and for learners to demonstrate practical creativity. Course assessment will provide the basis for grading attainment in the course award. The course assessment is graded A–D. The grade is determined on the basis of the total mark for all course elements. This includes a logbook, case study and practical model.

Progression: A pass at National 5 Practical Woodworking can support a range of Apprenticeship or college course applications.

Graphic Communication

National 5 Graphic communication (SCQF Level 5)

Entry requirements: BGE Graphic Communication, National 5 in similar subject (S5/6)

Course Summary:

The National 5 Graphic Communication course provides progression mainly from the craft, design, engineering and graphics experiences and outcomes. Candidates broaden their skills in a creative environment and are encouraged to exercise imagination, creativity and logical thinking. The course allows candidates to develop an awareness of graphic communication as an international language and an understanding of how graphic communication technologies impact on society and the environment. Candidates initiate, develop and communicate ideas graphically, and develop spatial awareness and visual literacy through graphic experiences. They interpret graphic communications initiated by others, and use graphic communication equipment, software and materials effectively. The course also provides opportunities to build self-confidence and enhance skills in numeracy, ICT, planning and organising work tasks, and in working independently and in collaboration with others. Candidates develop skills in critical thinking, decision making and communication.

Assessment:

Component	Marks	Duration
Component 1: question paper	80	2 hours
Component 2: assignment	40	See course assessment section

Progression: A pass at National 5 can lead to Higher Graphic Communication

Higher Graphic Communication (SCQF Level 6)

Entry requirements: BGE Graphic Communication, National 5 graphic Communication or similar

Course Summary:

This course develops skills that are complementary to other curricular areas, including expressive arts, sciences, and mathematics. It allows candidates to engage with technologies and consider the impact that graphic communication technologies have on our environment and society. Candidates are encouraged to exercise imagination,

creativity and logical thinking. They develop an awareness of graphic communication as an international language.

Assessment:

Component	Marks	Duration
Component 1: question paper	90	2 hours and 30 minutes
Component 2: assignment	50	see 'Course assessment' section

Progression: A pass at Higher Graphic Communication can support applications for a range of College and University courses.