

National 5 Design and Manufacture (Course Code: C819 75)

SCQF Level 5 (24 Credit Points)

Why study Design and Manufacture?

If you're into creating cool stuff and working with technology, Design and Manufacture is the perfect course for you. In this class, you'll get the chance to design products and figure out how to actually make them. It's all about using your creativity and mixing it with tech skills to bring your ideas to life.

You'll learn how to design things, draw them out, and communicate your ideas clearly. But it's not just about designing—you'll also be testing and improving your ideas to make sure they work perfectly. By the end of the course, you'll have skills that can help you in all sorts of areas, like art, maths, science, tech, engineering, and even graphics. Whether you want to design gadgets, build models, or solve real-world problems, this course will open up loads of opportunities for the future.

What will I study?

In the Design and Manufacture course, you'll get hands-on experience with everything that goes into creating products—whether it's a gadget, a model, or even something you use every day. You'll learn how to take an idea and turn it into a real product, all while considering things like how it looks, how it works, how much it costs, and how it affects the environment.

The course is split into two main parts:

Design

You will:

- Learn how to go from a brief (a problem or idea) to a full design proposal.
- Get the chance to come up with, develop, and communicate your own design ideas.
- Understand the process of designing, making, testing, and improving your products.
- Discover how things like cost, function, and appearance all play a role in creating the best design.

Manufacture

You will:

- Learn how to make prototypes and actual products.
- Build up practical skills through the design, making, and testing process.
- Get to know different materials and how they're used in products.
- Try out different manufacturing techniques and refine your designs based on what works best.
- Understand how products are made in real-world factories and businesses.

By the end of the course, you'll have developed a wide range of skills and knowledge, from creative design to practical making, that will help you in tons of different careers.

How will I be assessed?

The course assessment has **three** components **totalling 180 marks**:

Component 1: Question Paper (80 marks)

This part has two sections:

- Section 1 is worth 60 marks.
- Section 2 is worth 20 marks.

Component 2: Design Assignment (55 marks)

- In this task, you'll create a design proposal based on a brief you're given. This part will be set and marked by the Scottish Qualifications Authority (SQA).

Component 3: Practical Assignment (45 marks)

- For this part, you'll actually build a prototype of your design. Your teacher will assess how well you do this, and the SQA will verify the marks.

The question paper will be set and marked externally by the SQA.

The grade awarded is based on the total marks achieved across all course assessment components.

The course assessment is graded A-D.

Study Materials

- [SQA Past Papers Design and Manufacture National 5](#)
- [SQA Specimen Paper Design and Manufacture National 5](#)
- [SQA Understanding Standards Design and Manufacture](#)
- [BBC Bitesize National 5 Design and Manufacture](#)