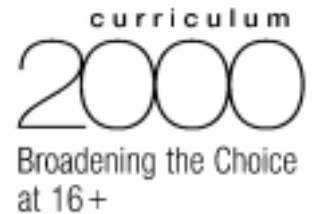


A Student's Guide to the Foundation GNVQ in Engineering



What do I need to know or be able to do before taking the Foundation GNVQ in Engineering?

It is important that you should have a lively and enquiring mind, an interest in engineering products and services, a willingness to explore new ideas and an ability to communicate your ideas effectively. In addition you will be expected to show an interest or aptitude for Engineering

What will I learn?

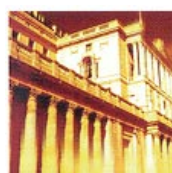
You will:

- ◆ be involved in a range of activities including investigations into different aspects of engineering industries
- ◆ be involved in learning in both classroom and workshop environments
- ◆ be involved in the design, making and investigation of engineered products and sub systems
- ◆ use practical engineering skills
- ◆ use computers to design, calculate, make and write illustrated reports

Who is the Foundation GNVQ suitable for?

This course will appeal to students who:

- ◆ are interested in how engineered products are designed and made
- ◆ want the opportunity to carry out practical work
- ◆ want to work with new technology
- ◆ want the opportunity to achieve credit through practical activities
- ◆ wish to keep their career options open.



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The structure of the Foundation GNVQ in Engineering

The Foundation GNVQ in Engineering is made up of 6 units (3 compulsory and 3 optional).

Compulsory Units:

Unit 1 – Design & Graphical Communication

You will develop a design solution to a customer's design brief. As a part of the design process you will learn to: consider the important features of the customer's design brief, suggest design solutions in draft form and present your chosen design solution using drawings. **This unit has external assessment.**

Unit 2 - Application of New Technology in Engineering

This unit provides you with the opportunity to study the role of new technology through the investigation of engineered products. You will learn about new technology involved in the following areas: information technology, new materials and components and control. **This unit has portfolio assessment.**

Unit 3 - Make Engineered Products

This practical unit enables you to develop an understanding of production planning and product engineering. This unit will help you to use product specifications, identify and use materials and components with suitable properties for the product. You will use processes, tools and equipment required to make an engineered product. You will learn to check the quality of your work and work to health and safety standards. **This unit has portfolio assessment.**

Optional Units:

Unit No.	Unit Title	Assessment
4	Applied Science & Mathematics for Engineering	External
5	Introduction to Automation in Engineering	Portfolio
6	Application of Computers in Engineering	Portfolio
7	Servicing and Maintenance in Engineering	Portfolio
8	Health and Safety in Engineering	Portfolio
9	Preparing for Employment in Engineering	Portfolio
10	Working as a Part of a Team	Portfolio

Further optional units may be chosen from the compulsory or optional units from any other Foundation GNVQ. This gives you the opportunity to sample several areas. The only restriction is that no two units with similar titles from different areas may be chosen.

What assessments will I do?

Two thirds of the units are internally assessed through assignments that are set and marked by your teachers or lecturers.

One third of the units are externally assessed through tests, set assignments, projects or case study work.

Can I develop my full range of skills by doing this course?

As well as covering Foundation GNVQ in Engineering you will develop your Key Skills in the areas of:

- ◆ Communication
- ◆ Application of Number
- ◆ Information Technology
- ◆ Problem solving
- ◆ Working with others
- ◆ Improving own learning and performance

Work towards your portfolio will offer you the greatest opportunity to develop and collect evidence for these Key Skills, although it will not cover every aspect. Other opportunities will arise during lessons, individual study and other activities you may undertake in or outside school or college.

If you take part in a discussion or role play, for example, you could be collecting evidence for part of your **Communication** Key Skill; reports that you write as part of your course could also provide evidence. Collecting and analysing information is part of the **Application of Number** Key Skill, and if you present this using IT, you are starting to produce evidence for the **Information Technology** Key Skill.

What courses or employment can I progress to at the end of my course?

A Foundation GNVQ is equivalent to 4 GCSEs at grades D – G.

Students gaining a Foundation GNVQ in Engineering will have access to a range of career and further education opportunities. You learn and use a variety of skills throughout the course, including collecting, analysing and interpreting data, communicating your findings in different ways, and identifying and developing the links between different parts of the subject. These skills are in great demand and are recognised and highly valued by employers and colleges.

GNVQ Engineering can combine well with GCSEs, NVQs and industry-related qualifications. Taken with GCSE Mathematics and Science it supports applications for almost any Engineering/Manufacturing/Material Science further education courses; taken with Art and Science it supports an equally wide range of courses such as Product Design.

Many students choose to use their qualification to go straight into employment, rather than go on to further education. Because GNVQ Engineering students develop the skills and the key skills that employers are looking for, you can consider a wide range of employment opportunities in such areas as:

- ◆ the engineering industries
- ◆ small business enterprises
- ◆ craft based activities
- ◆ trainee technician

Further details are available from your school or college.



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