Higher Computing Science (Course Code: C816 76)

SCQF Level 6 (24 Credit Points)

Why study Computing Science?

Computing science is vital to everyday life – on social, technological and economic levels. It shapes the world in which we live and its future. Computing is embedded in the world around us, from systems and devices in our homes to our places of work. It has also changed the way we learn, relax, travel and communicate.

Learning computing science will give you many benefits apart from learning about technology. You will learn valuable transferable work and life skills, such as being able to solve problems in a logical way, think creatively and handle information.

The skills you learn in this course are useful in lots of different job areas. These include science, communications, entertainment, education, business and industry.

Career Pathways

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

Computing and ICT

Transport and Distribution

Uniformed and Security Services

What do I need to get in?

The school or college will decide on the entry requirements for the course. You would normally have achieved:

- **National 5 Computing Science**

What will I study?

The course consists of **four** areas of study.

Software design and development

Development methodologies, Analysis, Design, Implementation (data types and structures), Implementation (data types and structures); Implementation (algorithm specification), Testing, and Evaluation.

Computer systems

Data representation, Computer structure, Environmental impact, and Security risks and precautions.

Database design and development

Analysis, Design, Implementation, Testing, and Evaluation.

Web design and development

Analysis, Design, Implementation (CSS), Implementation (HTML), Implementation (JavaScript), Testing, and Evaluation.

How will I be assessed?

The course assessment has **two** components **totalling 160 marks**:

- Component 1: question paper – worth 110 marks (consisting of 2 sections: section 1 worth 25 marks, and section 2 worth 85 marks)
- Component 2: assignment – worth 50 marks.

For the assignment component you will be given three tasks to complete, by solving computing science problems in the areas of software design and development, database design and development and web design and development. You will gain marks for use of the following skills on each task: analysis, design, implementation, testing and evaluation.

Both the question paper and the assignment are set and externally marked by the Scottish Qualifications Authority (SQA).

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

The course assessment is graded A-D.

Study Materials

- SQA Past Papers Computing Science Higher
- SQA Specimen Paper Computing Science Higher
- SQA Understanding Standards Computing Science
- BBC Bitesize Computing Science Higher

What can I go on to next?

If you complete the course successfully, it may lead to:

- **other qualifications in Computing Science or related areas.**
- **Advanced Higher Computing Science**

Further study, training or employment in:

- Computing and ICT
- Engineering

- Science and Mathematics