National 4 Mathematics (Course Code: C747 74)

SCQF Level 4 (24 Credit Points)

Why study Mathematics?

Mathematics is important in everyday life, allowing us to make sense of the world around us and to manage our lives. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

You will also get to develop skills in the areas of algebra, geometry and trigonometry as well as learn elementary calculus.

The skills you learn in this course are useful in many careers involving engineering, medicine, technology, business and the physical sciences.

Career Pathways

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

Animals, Land and Environment

Buying, Selling and Related Work

Computing and ICT

Construction

Engineering

Finance

Health and Medicine

Science and Maths

Teaching and Classroom Support

Transport and Distribution

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 3 Lifeskills Mathematics**

What will I study?

In this course you will build on your previous mathematical experience. You will learn to interpret information and solve problems relevant to real life and mathematical situations. You will use, explore and manage mathematical language and ideas, which are all important in scientific and research work.

The course has **three** compulsory units, plus an **added value** unit that assesses your practical skills.

Mathematics: Expressions and Formulae (6 SCQF credit points)

In this unit you will:

- use mathematical operational skills linked to expressions and formulae, such as manipulating abstract terms, simplifying expressions and evaluating formulae
- cover aspects of algebra, geometry, statistics and reasoning.

Mathematics: Relationships (6 SCQF credit points)

In this unit you will:

- solve equations, understand graphs and work with trigonometric ratios
- cover aspects of algebra, geometry, trigonometry, statistics and reasoning.

Numeracy (6 SCQF credit points)

In this unit you will:

- use numerical skills to solve straightforward real life problems involving time/money/measurement
- interpret graphical data and situations involving probability to solve straightforward real life problems involving money/time/measurement.

Added Value Unit: Mathematics Test (6 SCQF credit points)

In this unit you will:

- sit one question paper testing your mathematical operational skills, without the aid of a calculator
- sit one question paper testing your reasoning skills, where you can use a calculator.

How will I be assessed?

Your teacher or tutor will assess your work on a regular basis throughout the course. Items of work might include:

- practical work – working with real life plans or drawings, or using technology
- written work – investigative or project based tasks such as data collection or organisation
- class-based exams.

You must pass all units to gain the course qualification.

Study Materials

BBC Bitesize Mathematics National 4

What can I go on to next?

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

- **National 5 Mathematics**

Further study, training or employment in:

- Animals, Land and Environment
- Buying, Selling and Related Work
- Computing and ICT
- Construction
- Engineering
- Finance
- Health and Medicine
- Science and Mathematics
- Teaching and Classroom Support
- Transport and Distribution