Higher Applications of Mathematics (Course Code: C844 76)

SCQF Level 6 (24 Credit Points)

Why study Applications of Mathematics?

Mathematics is important in everyday life, allowing us to make sense of the world and manage our lives. You will learn how to model real-life situations and make connections and informed predictions.

You will develop the skills to interpret and analyse information, simplify and solve problems, assess risk, and make informed decisions. These skills will make you valuable to future employers.

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

Garage Services

Health and Medicine

Science and Maths

Teaching and Classroom Support

Transport and Distribution

What do I need to get in?

Entry is at the discretion of the school or college but you would normally have achieved:

- **National 5 Applications of Mathematics**
- **National 5 Mathematics**

What will I study?

The Higher Applications of Mathematics course develops, deepens and extends the operational and reasoning skills necessary for solving problems. Through real-life contexts, you acquire and apply mathematical and statistical skills directly relevant to life and work, and learn about how mathematics affects the world you live in.

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

Mathematical Modelling

You will:

- understand and apply the process of mathematical modelling to evaluate, analyse and interpret mathematical models
- use software effectively in calculations.

Statistics and probability

You will:

- apply statistical skills to basic probability
- apply statistical literacy skills to data
- apply statistical skills to correlation and linear regression
- apply statistical skills to data analysis, interpretation and communication.

Finance

You will:

- apply mathematical skills to calculating present and future values of monetary payments
- apply mathematical skills to solving problems related to personal financial products and transactions and analyse the results
- apply personal financial planning skills.

Planning and decision making

You will:

- understand and apply project planning and decision making.

How will I be assessed?

The course assessment has **two** components **totalling 110 marks**:

- Component 1: question paper – worth 65 marks
- Component 2: project – worth 30 marks.

The question papers will be set and marked externally by the Scottish Qualifications Authority (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 Applications of Maths Higher
- SQA Understanding Standards Applications of Mathematics

What can I go on to next?

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

- other qualifications in Mathematics or related areas.

Further study, training or employment in:

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