

Higher Mathematics (Course Code: C847 76)

SCQF Level 6 (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

What do I need to get in?

Entry is at the discretion of the school but you would normally be expected to have achieved:

National 5 Mathematics (at grade A or B)

What will I study?

This course develops, deepens and extends your mathematical skills building on your previous mathematics experience and preparing you for future study or career options. Throughout this course, you will:

- acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams
- select and apply mathematical techniques and develop your understanding of the interdependencies within mathematics
- develop mathematical reasoning skills and gain experience in making informed decisions.

You will:

- manipulate **Algebraic** and **Trigonometric** expressions, using these approaches to solve equations and sketch functions
- develop your understanding of **Geometry**: using vectors to further your understanding of 3D space and algebraic approaches to understanding the Circle and Straight Line properties in 2D.
- be introduced to: **Calculus**, differentiating and integrating functions and applying these skills to solve problems; and to mathematical modelling through recurrence relations and differential equations.

How will I be assessed?

The course assessment has **two** components **totalling 120 marks**:

- Component 1: question paper 1 (non-calculator) – worth 55 marks
- Component 2: question paper 2 (calculator) – worth 65 marks.

The question papers will be 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.

For further information see [Higher Mathematics - Course overview and resources - SQA](#)

Study Materials

- [SQA Past Papers Mathematics Higher](#)
- [SQA Specimen Paper 1 \(non-calculator\) Mathematics Higher](#)
- [SQA Specimen Paper 2 Mathematics Higher](#)
- [SQA Understanding Standards Mathematics](#)
- [BBC Bitesize Mathematics Higher](#)
- [Ushare Study Resources](#)
- [Free Higher Mathematics](#)
- [SQA Question Bank - Dynamic Maths](#)