

# Maths

## Higher

### Entry Requirements

A or B at  
National 5  
Maths

### Progression through Maths

Advanced  
Higher  
Maths

Achieving an A – C award allows the learner to progress to doing Advanced Higher Mathematics

### Course Content

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. The Higher Mathematics Course enables learners to select and apply mathematical techniques in a variety of mathematical situations. Learners interpret, communicate and manage information in mathematical form.

#### Expressions and Functions

This unit covers aspects of algebra, geometry and trigonometry, and also skills in mathematical reasoning and modelling.

#### Relationships and Calculus

This unit covers aspects of algebra, trigonometry, calculus, and also skills in mathematical reasoning and modelling.

#### Applications

This unit covers aspects of algebra, geometry, calculus, and also skills in mathematical reasoning and modelling.

### Skills Developed

The Higher course aims to

- motivate and challenge learners by enabling them to select and apply mathematical techniques in a variety of mathematical situations
- develop confidence in the subject and a positive attitude towards further study in mathematics and the use of mathematics in employment
- deliver in-depth study of mathematical concepts and the ways in which mathematics describes our world
- allow learners to interpret, communicate and manage information in mathematical form; skills
  - which are vital to scientific and technological research and development

### Assessment

To gain the award of the course, the learner must pass the course assessment (external examination which is graded A – D). The structure is as follows:

#### Question Paper 1 (non-calculator)

1 hour, 30 minutes - 70 marks

#### Question Paper 2

1 hour, 45 minutes - 80 marks

Both question papers will assess operational and reasoning skills, and will include both short answer and extended response questions.

### Related Careers

A sound grasp of Maths is useful in most jobs but some popular career paths include:

- Accountant
- Data Analyst
- Statistician
- Maths teacher
- Engineering
- Banking and Financial Services
- Retail
- Research scientist

It may surprise you to know that Michael Jordon, Brian May, Dara O'Briain, Carol Vorderman and Donald Trump all studied maths!

