

## **MATHEMATICS: CfE HIGHER**

### **Why Mathematics?**

This course enables you to build on your previous mathematical experience in the areas of algebra, geometry and trigonometry and introduces you to elementary calculus. The study of Mathematics provides you with many valuable skills. It is often very important when seeking employment or entry to further or Higher education and is an important part of your general education.

### **COURSE OUTLINE**

#### ***Mathematics 1- Expressions and Functions***

The general aim of this Unit is to develop knowledge and skills that involve the manipulation of expressions, the use of vectors and the study of mathematical functions. The Outcomes cover aspects of algebra, geometry and trigonometry, and also skills in mathematical reasoning and modelling.

#### ***Mathematics 2 –Relationships and Calculus***

The general aim of this Unit is to develop knowledge and skills that involve solving equations and to introduce both differential calculus and integral calculus. The Outcomes cover aspects of algebra, trigonometry, calculus, and also skills in mathematical reasoning and modelling.

#### ***Mathematics 3 – Applications***

The general aim of this Unit is to develop knowledge and skills that involve geometric applications, applications of sequences and applications of calculus. The Outcomes cover aspects of algebra, geometry, calculus, and also skills in mathematical reasoning and modelling

### **ASSESSMENT**

To gain the Course award the learner must pass the SQA Course assessment. The Course assessment will provide the basis for grading attainment in the Course award (100% of the marks available for grading are from the SQA examination).

#### **SQA Examination**

Component 1 — question paper: Paper 1 (Non-Calculator) 70 marks

Component 2 — question paper: Paper 2 80 marks

**Total marks 150.**

**Numerical skills underpin all aspects of the Course, and the ability to use these without the aid of a calculator will also be assessed.**

### **ENTRY TO THE COURSE**

This is at the discretion of the school/college, but you would normally be expected to have attained at least a B at National 5 Mathematics.

### **PROGRESSION**

Successful completion of this course may lead to:

Advanced Higher in

- Mathematics

**Further advice and information on these options is available from your Subject Teacher, Home Area Principal Teacher and Careers Adviser.**