## **Mathematics**

The A Level Mathematics course aims to encourage candidates to develop their understanding of mathematics and mathematical processes; to develop confidence and enjoyment; to develop their abilities to reason logically and to recognise incorrect reasoning; to extend their range of mathematical skills and techniques; to develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected; to recognise how a situation may be represented mathematically and understand the relationship between 'real world' problems and other mathematical models; to use mathematics as an effective means of communication; to read and comprehend mathematical arguments and articles concerning applications of mathematics; to acquire the skills needed to use technology effectively, to recognise when such use may be inappropriate and to be aware of limitations; and to develop an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general.

Each student who enrols on the mathematics course is given a diagnostic test to ensure that their basic skills are sufficient to commence study at this level. Students will be guided to address areas of weakness or be advised of a more suitable course of study.

Successful completion can lead to studying mathematics at degree level at university. With a maths degree the world is your oyster! Positions will be open to you in electrical engineering, surveying, computing and finance, banking, business, marketing.

Mathematics combines well with biology, physics, graphics, geography and business and economics.

'I love the clarity of it and the way the subject is linked to every part of our world. Maths gets more relevant the higher the level you get to.'

## ASSESSMENT and CONTENT

Edexcel Advanced GCE in Mathematics (9MA0)

Year 1:

Unit 1: Pure Mathematics 1

Unit 2: Statistics and Mechanics 1

Year 2:

Unit 1: Pure Mathematics 2

Unit 2: Statistics and Mechanics 2

Assessment is by two examinations at the end of Year 13.

The course requirements:

Grade 6 in English Language and Grade 7 in GCSE Mathematics. High confidence in algebra is essential for the course.