

Is this subject right for me?

- Do you enjoy the challenge of trying to solve a problem even if you don't get the answer straight away?
- Are you confident about algebra, and enjoy it?
- Are you happy being assessed by exams rather than coursework?

Mathematics is a challenging but fascinating subject which has applications in most careers. To train as an accountant, an economist, a financier, scientific researcher or engineer you are likely to need the skills developed in AS and A Level Maths.

What is the course content?

AS Level (Year 1)

Single Maths students will study three modules:

Everyone will study Pure Maths (C1 and C2) and will choose one application of mathematics out of:

- Statistics (S1)
- Mechanics (M1)

Pure Maths includes topics like Algebra, Coordinate Geometry, Differentiation and Integration, Trigonometry, Sequences and Series. These are the building blocks on which all other mathematics is based.

Mechanics is about the mathematics of the physical world. It is very useful to students studying Physics or those who want to go on to be engineers or architects. You will learn about Elementary modelling, Vectors, Newton's laws of Motion, Friction, Momentum and Collisions.

In Statistics, you will study descriptive statistics and data collection, probability, correlations and regression, and the Normal Distribution. The topics are particularly relevant to students studying Biology, Psychology, Geography or Economics.

You can also take 'Double Maths'. This involves 8 lessons a week instead of the usual 4, and you will study 6 modules per year rather than 3, so that at the end of

two years you will have A levels in both Mathematics and Further Mathematics. Studying Double Maths gives you an opportunity to study 'Further Pure' units which introduce topics such as complex numbers, matrices and differential equations. More and more top universities are now requiring Double Maths for entrance to Maths degrees.

Year 1 units: C1, C2, C3, C4, FP1, M1

Year 2 units: FP2, FP3, M2, S1, S2, D1

A Level (Year 2)

In the second year, single Maths A Level students will study two more Pure modules (C3 and C4) and will continue with their application modules or switch to Decision 1 as their application.

AS Further Maths (Year 2)

Those of you who enjoy the AS year and want to take the subject further than A level in their second year can study AS Further Maths. These students have 4 extra lessons per week in which they study 2 extra Pure Maths modules (Further Pure 1 and Further Pure 2) and an Applied Module (Decision 1).

How will your work be assessed?

Each module is assessed by an externally set examination of 1½ hours, 3 modules at the end of the first year for AS; and 3 modules at the end of the second year for A Level.

What are the entry requirements?

The general entry requirements for studying at Advanced level apply, and must include a minimum of grade B Maths GCSE.

Other information

You will be expected to own a graphical calculator (approximately £25), but we will make a bulk order for those who don't have them in order to reduce costs. These make learning many topics more interesting and easier to understand.

Students studying Maths at BHASVIC don't just get great results, they also have lots of fun!

Maths Soc. meets weekly to explore maths outside the A Level syllabus and there are regular maths trips such as visits to the theatre and our Mathematical Tour of Barcelona.

In line with college policy, if you cannot afford to purchase a graphical calculator, financial assistance may be available and you should speak to your Senior Tutor in confidence.

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Mathematics

AS and A level

BHASVIC