

## Overview of KS5

Students in the sixth form who have chosen to study advanced level mathematics will come to appreciate the intrinsic consistency and beauty of the subject through:

- Developing a deep conceptual understanding of the topics studied, the links between them and the algebra that permeates and generalises all of them
- Becoming fluent in manipulating algebraic objects
- Applying high-level mathematics to challenging problems which require reasoning from more than one area of mathematics
- Learning to communicate mathematics clearly and rigorously
- Seeing the need for mathematics in a wider context

Advanced level mathematics is in a transition period over 2017-18 as we come to the end of one syllabus and begin a new one, moving from modular assessment to linear (end of course) assessment.

It is our intention to enter our students for the Edexcel A level in year 12 which they will study over a two year period and complete in the summer of 2019. There are three terminal examinations at the end of year 13. Papers 1 and 2 cover pure mathematics and paper 3 is an applications paper covering mechanics and statistics.

Calculators can be used on all three papers and all are of 2 hours duration.

In 2017/18, year 13 students will complete their A level using the old specification. By this time students will have completed three modules in year 12 (core 1 and 2 and statistics 1) and they will complete three further modules in year 13 (core 3 and 4 and mechanics 1).

All of these papers are of equal weighting, calculators are allowed and last for 1hr30m. They will be sat in the summer of 2018.

We also offer further mathematics as an A level option. This has to be done in conjunction with A level mathematics not instead of. It builds upon the skills gained during the A level mathematics course and offers a particularly useful preparation for students who intend going to university to study a mathematics degree or a degree with a high mathematical content.

In year 12 students will begin the new further mathematics specification which will be a 2 year course with four terminal examinations (each 1h30m long) to be taken in the summer of 2019.

Two of these papers are core further mathematics papers, the other two are options which the school decides – we are intending to opt for the further pure options.

We intend using the Edexcel exam board.

In year 13 students will complete their further mathematics course using the old specification. In year 12 they will have completed three modules (further pure 1, statistics 2 and decision 1) and will study a further three modules in year 13 (further

pure 2 and 3 and mechanics 2). Each exam carries equal weighting, calculators can be used and each lasts 1hr30m.  
We are using the Edexcel exam board.