A Level Mathematics OCR MEI



Why study Mathematics?

A Level Mathematics is a versatile qualification, wellrespected by employers and is a "facilitating" subject for entry to higher education. Careers with good mathematics skills and qualifications are not only well paid, but they are also interesting and rewarding. People who have studied mathematics are in the fortunate position of having an excellent choice of career. Many employers highly value mathematics qualifications as mathematics students become better at thinking logically and analytically.

Having strong mathematical skills is important for many university courses, particularly Sciences, Technology, Engineering and Mathematics (STEM) degree courses. Studying A-Level Mathematics will help support other A-Level subjects such as Physics, Chemistry, Biology, Geography, Psychology, Economics and Business Studies.

About the course

Through problem solving you will develop resilience and be able to think creatively and strategically. The writing of structured solutions, proofs and justification of results help you to formulate reasoned arguments. You will develop excellent numeracy skills and the ability to process and interpret large data.

We offer a two-year linear A-Level with the option to complete the AS qualification at the end of the first year.

Year 12

In Year 12 we study three broad topics of Mathematics: Pure, Mechanics and Statistics.

During your Pure studies we will build on your algebra, geometry and number skills from GCSE Mathematics and extend these ideas further.

Mechanics is the study of modelling the world around us, the motion of objects and the forces acting on them. In these topics will explore how we can apply your Pure techniques and skills to solve problems in modelling the world around us.

We will extend your understanding of Statistics from GCSE, looking at how to calculate the likelihood of an event occurring and reaching conclusions from data.

Year 13

In Year 13 we will build on your knowledge from the first year of Pure, Mechanics and Statistics. You will be introduced to more sophisticated mathematical concepts, such as differential equations which have applications to modelling Tsunamis, weather systems and vibrations of drums.

Assessment

The A Level is assessed through three external examinations at the end of Year 13. There is an emphasis on problem solving throughout the new 'A' Level.

Entry criteria

A grade 6 in GCSE Mathematics.

Outside the classroom

We offer students the opportunity to take part in the UKMT individual challenges and Senior Team Challenge.





