

Core Mathematics

Examination Board: AQA (1350)
(Level 3 qual equivalent to AS Level)

GCSE Required: Mathematics Grade 5
Skills: Interest in applying Maths

Further details can be found by scanning this QR code:



Or visit <http://filestore.aqa.org.uk/resources/mathematics/specifications/AQA-1350-SP-2014.PDF>

What is covered in the course:

Analysis of Data

- Data & Collecting and sampling data
- Representing data numerically & representing data diagrammatically

Maths for personal finance

- Numerical calculations
- Percentages
- Interest rates
- Repayments and the cost of credit
- Graphical representation
- Taxation
- Solution to financial problems

Estimation

- The modelling cycle
- Fermi estimation

Critical analysis of data and models

- Presenting logical and reasoned arguments in context
- Communicating mathematical approaches and solutions
- Analysing critically

The normal distribution

- Properties of the normal distribution
- Notation
- Calculating probabilities

Probabilities and estimation

- Population and sample

- The mean of sample size n
- Confidence intervals

Correlation and regression

- Correlation
- The product moment correlation coefficient (PMCC)
- Regression lines
- Calculations

How will the subject be taught:

This is a one year course studied in Year 12 as a fourth subject. Students will be encouraged to develop their skills and strengths through continuous staff guidance and motivation. A variety of teaching and learning styles will be adopted including the use of practical activities, problem solving, presentations and self-supported study.

The course is designed to contain significant amounts of real-life application, and a large proportion of the time will be spent discussing the uses of Maths as well as simply learning skills.

There will be two papers, both 1 hour 30 minutes long. A scientific or graphics calculator can be used.

What opportunities come with this subject:

Core Mathematics is designed for students who wish to continue with Maths at Sixth Form but who do not wish to study Maths A-Level. It would be ideal to support A-Levels in other subjects with a significant Maths content, such as Psychology, Geography, Biology, Economics, Business and Computing. It also provides important life skills with a focus on data analysis and finance.

Higher Education/Career Implications:

Core Mathematics carries UCAS points equivalent to an AS level. It is recognised by many universities as appropriate mathematical preparation for those courses that have a mathematical element but that don't require an A-Level in Maths.