



Further Mathematics

Why study Further Mathematics?

Further Mathematics provides you with transferable skills for the real world, logical skills, analytical skills and problem solving. There is the opportunity to study Mechanics, which looks at the Mathematics of the real world by studying forces and equations of motion. Or you could study Statistics in more depth. Further Mathematics A Level is well-respected by employers and admissions tutors for all degree subjects. Students who have studied Further Mathematics are in a fortunate position because they will have a wide range of career opportunities. This course is for able students who are considering taking Mathematics, Physics, Engineering or Computing at a leading university. Students taking A Level Further Mathematics also take A Level Mathematics.

Course Outline

In the first year, students will study:

- Proof, Complex numbers, Matrices, Polar coordinates, Linear regression, Statistical distributions Correlation Momentum and impulse, Collisions and Centres of mass

In the second year, students will study:

- Further algebra and functions, Further calculus, Further vectors, Hyperbolic functions and Differential equations
- Hypothesis testing, Chi squared tests, Elastic strings and springs

Assessment

You will sit three, 2 hour, written examination papers (each worth $\frac{1}{3}$ the final A Level grade), all of which are taken at the end of the A Level course. Papers 1 and 2 are Pure Maths, Paper 3 is split between Mechanics and Statistics. The papers use a variety of assessment methods including short and long answer questions. Calculators are allowed for all papers.

Head of Learning

Mrs S Mann

Departmental Staff

Mrs S Babb
Mrs L Burrill
Mr W Capstick
Mr A Carson
Ms A Curry
Mrs N Entwistle
Mr A Ha
Mr A Ibrahim
Mrs McMahan
Mr J Procter
Mr R Wallace

Exam Board

AQA A Level Further Mathematics

Where are they now?

Recent students of Mathematics at CRGS have gone on to study:

- Chemistry (Oxford, Warwick)
- Civil Engineering and Architecture (Southampton)
- Computer Science (Lancaster)
- Economics and Mathematics (Bristol)
- Engineering (Cambridge)
- Mathematics and Finance (York)
- Mathematics (Warwick, Bristol, Durham)
- Mathematics and Music (Glasgow)
- Natural Sciences (Cambridge, Durham)
- Physics (Manchester, Birmingham)
- Physics with Philosophy (York)



Frequently Asked Questions

Q. Is any previous knowledge required to study this subject?

Students should have Grade 7 or above in GCSE Mathematics.

Students are required to meet the General Entry Requirement of a minimum of 4 GCSEs at grade 6 with at least GCSE grade 4 in English Language.

Q. How is the course structured?

You will have 3 teachers for 8 lessons a week. All 3 teachers will start teaching the A Level Mathematics Year 1 work, before starting the Further Mathematics Year 1 work. All staff teach Pure Maths. One teacher will cover the Mechanics work and one will cover the Statistics work.

Exam Board Specification

AQA A Level Further Mathematics www.aqa.org.uk

Notes:

CRGS Sixth Form Admissions

Apply

[www.crgs.org.uk/
sixth-form/admissions](http://www.crgs.org.uk/sixth-form/admissions)

Contact us

Email
[sixthformadmissions
@crgs.org.uk](mailto:sixthformadmissions@crgs.org.uk)

Telephone
01200 423118

Clitheroe Royal Grammar
School Sixth Form
York Street
Clitheroe
Lancashire
BB7 2DJ