# **SUBJECT: Further Mathematics EXAM BOARD: AQA**



Course
Overview
(Y12)

### **Pure Maths**

Proof, Complex Numbers, Matrices, Further Algebra & Functions, Further Calculus, Further Vectors, Polar Coordinates, Hyperbolic Functions.

#### Mechanics

Dimensional Analysis, Momentum & Collisions, Work, Energy & Power, Circular Motion.

#### Discrete Maths

Graphs, Networks, Network Flows, Linear Programming, Critical Path Analysis, Game Theory, Binary Operations.

## Useful websites

<u>www.furthermaths.org.uk/student\_area</u> - Further Maths Support Programme www.aga.org.uk - specification, specimen papers.

www.mathcentre.ac.uk - support materials, free of charge. There are a variety of resources – self-study guides; test yourself diagnostics and exercises, video tutorials and case studies. Resources are available on-line, and may be printed or downloaded.

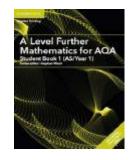
<u>plus.maths.org/content</u> - *Plus* is an internet magazine written by the Millennium Mathematics Project which aims to introduce readers to the beauty and the practical applications of mathematics.

# Essential text books and reading list

A-Level Further Mathematics for AQA Student Book 1 (AS/Year 1)

Authors: Stephen Ward, Paul Fannon Publisher: Cambridge University Press

ISBN-13: 9781316644430



A graphical calculator is also recommended. These will be available to purchase through the college.

## Summer task

Students are expected to have strong skills across the full range of mathematical topics which will be drawn upon in all areas of the Further Maths course. You should also have an ability to spot patterns and links between topics to aid problem solving, a skill which will be developed throughout the course.

The summer task booklet provided at the induction session must be completed in preparation for the course and handed in at your first Further Maths lesson in September.