

# FURTHER MATHEMATICS



**Exam Board:** AQA

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## ASSESSMENT:

- Paper 1 – Pure Maths
- Paper 2 – Pure Maths
- Paper 3 – 50% Mechanics and 50% Statistics

## SUBJECT SPECIFIC ENTRY CRITERIA:

5 GCSE grades 9-5, including English and Mathematics, a grade 7 in GCSE Mathematics and must be studying A Level Mathematics

## KEY INFORMATION:

This new linear course, designed with the help of higher education institutions helps equip students with a strong understanding of higher-level mathematics including an increased use of technology. The course involves a holistic, non-modular approach to mathematics with problem solving and modelling being central.

The course is assessed at the end of year 13 and involves three x 2-hour exams (all calculator).

Two thirds of the course involves pure maths which both extends on the topics covered in the mathematics A Level, as well as new topics such as complex numbers, matrices, polar coordinates, hyperbolic functions and differential equations.

The mechanics content includes dimensional analysis, momentum and collisions, work, energy and power and circular motion.

The statistics content includes discrete random variables, Poisson distribution, continuous random variables, exponential distribution and inference.



## POSSIBLE CAREER PATHS:

- ➔ Engineering such as Aeronautical/Space Engineer, Artificial Intelligence, Cyber/Software Engineer
- ➔ Cryptographer/Crypto Maths Researcher
- ➔ Medical career including Research Scientist/Vaccine developer, Biometric Engineer.
- ➔ Educational Career including Higher Educational Teaching/Lecturing
- ➔ Accounting and Finance including Financial Analyst/Treasury Analyst, Tax Accountant/Auditor
- ➔ GCHQ/Armed Forces such as Weapons System Analyst/Intelligence Analyst

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