

6th Form Courses

MATHEMATICS



- How do particles interact under gravity?
- How and why do populations grow?
- What mathematical principle links velocity and distance?
- Is it possible to use graphs to model any scenario?

By studying Mathematics, you will be able to learn all these things and more!

"A Level Maths is tremendously important. It provides a foundation for all scientific, technical, engineering and mathematical careers and a flying start for many other types of career such as finance, medicine, agriculture...the list is endless"

The Institute of Mathematics

A Level Mathematics

What is the course like?

It all comes down to what maths is.

- Maths uses its own language, which is made up from numbers, symbols and formulas.
- To explore the rules, we need to measure or identify essential problems like distance, speed, time, space, change, force and quantities.

Course content

- Proofs, Algebra and functions, Coordinate Geometry, Sequences and Series, Trigonometry, Exponentials and Logarithms, Differentiation, Integration, Numerical Methods, Vectors
- Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Statistical hypothesis testing
- Quantities and units in mechanics, Kinematics, Forces and Newton's Laws, Moments

Entry requirement

A grade 6 or above in GCSE Mathematics

Duration

2 years – A Level Maths or Further Maths

How will I be assessed?

There are 3 exams each lasting 2 hours. These are sat at the end of the school year.

For Maths, the first 2 papers are on Pure Mathematics and paper 3 is on Statistics and Mechanics.

For Further Maths, the first 2 papers are on Core Pure Mathematics and papers 3 and 4 are Further Mathematics. The Further Mathematics papers are optional papers and students are required to choose two out of the following four topics.

The topics are:

- Further Pure Mathematics
- Further Statistics
- Further Mechanics
- Decision Mathematics

Where does it lead?

Upon completion of your A level, you will be equipped for Higher Education at University. It will equip you for a wide range of careers including: accounting, medicine, engineering, forensic pathology, finance, business, teaching, IT, games development, scientific research, programming, civil service, design and construction to name but a few.

Is this course suitable for me?

According to bestcourse4me.com, the top seven degree courses taken by students who have an A Level in Maths are:

- Maths
- Economics
- Physics
- Accounting
- Mechanical Engineering
- Computer Science
- Chemistry

Additional Information

Studying Maths helps predict the future....

But it doesn't stop there; as a subject, Maths is also continually growing and changing. Mathematicians and scientists expand on what they already know to discover new theories and inventions.

How to Apply

- Complete and return an application form. Application forms are available from the Wellington Academy website: www.thewellingtonacademy.org.uk.
- Your completed application should be returned to Dave Bissington, Head of 6th Form, this can be done either via your tutor (if internal) or delivered to the school reception.
- Alternatively please complete an online form, found under 2021 – Applications on the 6th Form tab.
- You will have an individual course consultation, during which provisional courses will be agreed.
- The offer of the course will be conditional upon you meeting the required entry grades, any subject specific criteria and having a suitable reference from your previous school.
- Your final interview will be held immediately after you have received your GCSE results. This is when your actual offer is negotiated and confirmed.

www.wellingtonacademy.org.uk

The Wellington Academy
Tidworth, SP11 9RR
T: 01264 40 50 60

E. 6thform@thewellingtonacademy.org.uk