

Mathematics

Department

Years 12-13

The Latymer School

Why study maths in the sixth form?

Maths can lead to many fantastic careers...

Engineering

Accountancy

Project Management

Psychology

Actuary

Pilot

Analyst

Medical Research

Teaching

Game Designer

Banking

Football Analytics

Data Scientist

Corporate Law

Architect

IT Consultancy

Medicine

Lecturing

Programmer

Air Traffic Control

Statistician

What maths do you study in the sixth form?

Pure

Beautiful maths that is abstract but can have applications to the real world or problem solving.

Mechanics

Maths relating to motion and forces, good for those doing A-Level Physics.

Statistics

Maths relating to data, good for those studying A-Levels in Humanities/Biology/Economics.

Preparing for maths in the sixth form

Once you've finished your GCSE exams, practise your algebra skills over the summer holiday by working through Edexcel's Level 3 Algebra papers, details available on the 'Sixth Form admissions' page on our website.

Doing these papers should make the transition from GCSE to A-Level that little bit smoother.

What are the options?

Single maths

A-Level Maths

Double maths

A-Level Maths

A-Level Further Maths

Exam board is Edexcel

What is expected for single maths?

Grade 7 in GCSE Maths

Past data suggests a minimum of grade 8 is needed to give you the best chance of A*AB in A-Level Maths.

Competence in GCSE algebra

Summer holiday + first two weeks = algebra revision
third week = algebra test

Hard work

A-Level is a big step up from GCSE.

How does single maths work?

A-Level Maths content

$\frac{2}{3}$ Pure + $\frac{1}{3}$ Mechanics/Statistics

3 exams at the end of Year 13

Pure paper 1 (2 hours)

Pure paper 2 (2 hours)

Mechanics/Statistics (2 hours)

Teaching

4 hours 40 minutes of maths each week

2 teachers (1 Pure/Stats, 1 Pure/Mech)

What is expected for double maths?

Grade 8 in GCSE Maths

Places given to students with grade 9.

Remaining places offered to those with grade 8.

Expertise in GCSE algebra

Summer holiday + first two weeks = algebra revision
third week = algebra test

Hard work

Double maths is a big step up from single maths.

How does double maths work?

Year 12

Complete A-Level Maths content.
3 exams at the end of Year 12.

Year 13

Complete A-Level Further Maths content.
4 exams at the end of Year 13.

Teaching

9 hours 20 minutes of maths each week
4 teachers (2 Pure, 1 Mech, 1 Stats)

How does double maths work?

A-Level Further Maths content

$\frac{1}{2}$ Core Pure + $\frac{1}{2}$ Further Mech/Stats

4 exams at the end of Year 13

Core Pure paper 1 (1½ hours)

Core Pure paper 2 (1½ hours)

Further Mechanics 1 (1½ hours)

Further Statistics 1 (1½ hours)

If you choose double maths

You will have 4 A-Levels by the end of Year 13.

You cannot pick double maths with the intention of not taking A-Level Further Maths in Year 13 as you are depriving someone else of a place on a heavily over-subscribed course.

If you achieve grade C - U in A-Level Maths in Year 12 you may not progress to Further Maths in Year 13 but will instead repeat A-Level Maths.

How is maths taught?

In a typical 1 hour 20-minute lesson students are taught new content and problem-solving skills through teacher-led whole class interaction, before practising independently.

Homework is based on the class work, and at least one hour of independent study per day is essential to attain the highest grades.

There are regular assessments and revision for these is done online using Dr Frost Maths.

How are the classes arranged?

Majority of Year 12 students study maths.

Students are split into 10 groups:

7 single maths

3 double maths

Classes are arranged the same in Year 13.

Maths or maths related degrees

Double maths is expected at many universities eg. Oxford, Cambridge, Warwick, Imperial, UCL, KCL, Bath, Bristol, Durham.

Maths entrance papers may also be required eg. MAT (Oxford) or STEP (Cambridge).

Single maths is sufficient at some universities but TMUA/MAT/STEP may then be required.

Double maths is **not** required for medicine.

UCAS predictions

Single maths

UCAS predictions for A-Level Maths are calculated using the internal UCAS Maths exam results at the end of Year 12.

Double maths

UCAS predictions for A-Level Maths/Further Maths are calculated using the A-Level Maths exam results at the end of Year 12.

The process is displayed clearly on the maths corridor and outside the maths staffroom.

A-Level results 2024

Year 12	A*	A*A	A*AB
Maths	45.5%	81.8%	92.4%

Year 13	A*	A*A	A*AB
Maths	35.5%	69.0%	81.9%
Further Maths	36.2%	72.3%	91.5%

For further information see

<https://www.latymer.co.uk/national-curriculum/stem/mathematics>