



Year 12 Admissions - Class of 2028

Headteacher's Welcome

Dear Parents and Carers,

As I step into the role of Headteacher, I am thrilled to join the vibrant community at ULMaS. Entering the school at such an exciting moment—on the heels of outstanding summer results and our recent international success in CERN's Beamline competition—makes it an absolute privilege to lead this next chapter.

Our Beamline success perfectly demonstrates what makes ULMaS special: ambitious students applying high-level problem-solving, collaboration, and drive on a global stage. Combined with the exceptional exam results achieved by our leaving cohort this summer, it is clear that our approach to specialist STEM education is delivering real, transformative impact across Merseyside.

This half term, we also welcomed our vibrant new Year 12 cohort. Their energy, enthusiasm, and curiosity have already made a huge impression on the staff team, and I look forward to seeing how they challenge themselves and grow over the coming years.

On a personal note, I am delighted to have the opportunity to work with such amazingly enthusiastic and positive students and staff, I am deeply invested in seeing our students thrive both academically and as well-rounded individuals.

Mathematics, science, and analytical thinking remain at the core of our identity. But just as fundamental is the supportive, tight-knit culture that allows our students to excel. My priority is to build directly on these strong foundations—maintaining high academic ambitions while ensuring every student gets the tailored support they need.

I want to express my sincere gratitude to my predecessor, Mr Damian Haigh, for his vision, dedication, and leadership in establishing ULMaS, and to all of you for the warm welcome I have received. I look forward to working closely with our staff, students, and families as we push forward together.

Warm regards,
Dan Vickery



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Important Contact Information:

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attendance@liverpoolmathsschool.org
SENCo@liverpoolmathsschool.org
outreach@liverpoolmathsschool.org

Term Dates 2026/27:

AUTUMN/WINTER

Wednesday 2nd September 2026 (Y12 only), Thursday 3rd September (Y12 and Y13) 2026 - Friday 23rd October 2026
Monday 2nd November 2026 - Thursday 17th December 2026 (**INSET - Friday 20th November**)

Mathematics

It's great to be back and we have thoroughly enjoyed welcoming so many new Year 12 students into the school, as well as seeing our Year 13 students again and hearing about their summers.

Year 12 have begun the A level course by covering several topics which they will have been familiar with from GCSE - surds, indices, quadratic equations and simultaneous equations. This allows students to settle into their new classes without immediately encountering completely new concepts, but we have been able to quickly provide them with extension work and some thorough understanding within these areas. We have been very impressed with the Year 12 students' willingness to collaborate and share their ideas, as well as their efforts to adhere to our routines. I hope they are enjoying school so far.

Year 13 has begun the year by focusing on the Core Pure part of the Further Maths Curriculum. They have been using the cross product and vectors to find distances, recapping proof by induction and are now exploring matrices and calculus further than they did in Year 12. Again, they have begun the year in a positive way, engaging in lessons and continuing to be an enjoyable year group to work with.

- Colin Thomas Head of Maths

Physics

This year we have welcomed an even larger Year 12 cohort of really keen students. They are working hard on recalling what they know of maths to apply to physics, and we have already started with the first A level physics topic, Electricity! They are really enthusiastic students, and we already have 5 teams (each of 6 pupils) ready to compete on CanSat, a design competition of a can size satellite to make measurements of air temperature and atmospheric pressure, transmitting telemetry data to the ground station at least once every second during descent. I'm very curious to hear about their designs and their secondary mission!

Year 13s, again in bigger numbers than before, have already started their last A level year. It is going to be busy and really hard to mix applying to university with learning the topics and preparing for the exams, but they are in good spirits, and already through their second A2 topic, Gravitational Fields.

- Aurora Gutierrez-Sosa Head of Physics

Computer Science

Welcome to the new year 12 who have joined us, and welcome back to our year 13's who are continuing into year 13 computer science.

For year 12 we have introduced the year getting all students working on a new programming language Javascript. They have been following a set of bootcamp Javascript programming challenges taking them through sequence, selection iteration up to file handling. They have also been working on Web technology theory including HTML, CSS with our Javascript programming. We have introduced students to the topic of data types looking at number theory, representing various values, numbers, characters, colour, sound as binary, and representing many differing number formats, whole numbers, integers, real numbers including fixed and floating point number representations.

I would like to say a big well done to the year 13's who sat a resit paper during August, all students who sat a resit improved their May grade. This is difficult having not had lessons over the summer, so shows a real commitment from the student to their studies, well done! Year 13 computer science students have also worked on their designs for the first project iteration, and in September they have been developing this first prototype of the project. In theory lessons we have covered Data types including floating point arithmetic, binary shifts and bitmasks. We have also been studying Boolean Algebra laws of simplification, De-Morgan's theorems and reviewing the circuits of half and full Adders as well as the D-type flip-flop memory circuit.

- Steve Wentworth Head of Computer Science

Advanced Mathematician Programme:

We have started the new year of the Aspiring Mathematician Programme by introducing Year 12 to the UKMT challenges, the first of which was the Girls Olympiad and the Girls Olympiad. These took place on Tuesday 22nd September and we had more girls participate than ever before. The Senior Maths Challenge takes place on 7th October and all students in the school will participate.

Year 12 have since moved on to looking at Proof and Number Theory, exploring the rigour required in complete mathematical proofs and meeting new symbols along the way. They have been introduced to LaTeX, a coding software widely used in academia to produce reports and articles that contain mathematical content.

Year 13 have met with teachers to provide updates on where they are up to with their individual research projects and group industry projects. There are many incredibly interesting topics being explored in great depth and the presentation day in February promises to be an exciting event. They are now putting those projects onto the backburner for a while and beginning to engage with the content of the Extra Pure module from the Further Maths Curriculum. The curriculum introduces topics such as multivariable calculus and concepts in matrix algebra such as the Cayley-Hamilton theorem but our AMP lessons allow us to stretch beyond what is required by the exam.

Outreach

Outreach events have already got going for this term. Samuel is running weekly in person sessions to help Year 13 students from across the region prepare for their University Entrance exams. This has been well attended and a very useful source of additional support.

Our online Maths and Physics masterclasses start at the end of September. On Monday evenings Dave will be focusing on Higher tier GCSE Physics (not board specific) and on Tuesdays Dan will be working on interesting and challenging mathematical problems. Both are for KS4 students (with Y11 priority) and are an excellent way to meet like-minded people (albeit online), stretch your mind and limber up for your GCSEs! There are still places left; if you know anyone who would like to join, sign ups are [here](#).

Saturday events launch on 3rd October kicking off with a joint venture with Mathematical Education in Merseyside (MEM), hosting their first Masterclass of the season. Then, on 10th October, we will hold our first STEM Saturday for Years 7 to 9, entitled 'Engineering in Nature'. We are assured that they will be building structures and working with chocolate - check back in the next newsletter to find out how it went. At time of writing, there are a few places left - sign up [here](#).

We have already started visiting schools for our Go Further visits - Maria works with Year 11s at Woodchurch High on Mondays and Steve goes to St Mary's in Wallasey on Thursday, both after school. If you know any schools that would like one of our qualified Maths, Physics or Computer Science teachers to visit them for a half term, we still have a few slots left. Contact us on outreach@liverpoolmathsschool.org to find out more.

Schools can also bring a group of students to visit us on the Campus. Visits take place between 10am and 2pm on Fridays - email us if you would like any more information.

- Maria Bennet, Head of Outreach

Pastoral and Personal Enrichment Programme

For those new to the school, our PPEP offers students access to an exceptional personal development curriculum. This covers personal development lessons, tutor time, tutor one to ones, assemblies and visits.

We have begun year 12 with a range of activities linked to change and settling in, the induction days were planned to introduce everyone through a range of small groups, up to class and whole year activities. We are also looking at study skills as many year 12 students might find adjusting to new expectations in their A-Level study challenging.

Year 13 are moving forward with a range of skills including writing applications and interview skills. In the programme we are keen for year 13 to receive support from their form tutors, our careers advisors and UCAS advisor team regarding their next steps. Much more to come through the year as well.

Stakeholders are asked about their thoughts on the content of our Relationship, Sex and Health Education curriculum. This has been emailed out to parents, the link to see the content and add your thoughts is [here](#)

- David Hemsley, Deputy Headteacher

Results 2026

We are thrilled to celebrate the phenomenal achievements of our Class of 2026 at the University of Liverpool Maths School! This outstanding cohort of 54 students has delivered an exceptional performance across the board, securing an impressive 47.57 average point score. Demonstrating world-class academic rigour, 83% of all entries earned A*-B grades, with almost two-thirds (63%) awarded coveted A or A* marks—including 32% at the top A* grade. Over four in ten students (43%) achieved a sweep of three or more A*/A grades, while 59% secured AAB in key facilitating subjects. Excellence shone particularly brightly across our core specialist disciplines: A-Level Mathematics led the way with a stunning 96% A*-B pass rate (82% A*/A), complemented by standout results in Physics (82% A*-B), Computer Science (78% A*-B), and Further Mathematics (71% A*-B). These brilliant outcomes reflect the incredible dedication of our students and staff, keeping our school firmly established among the top-performing sixth forms in the country!

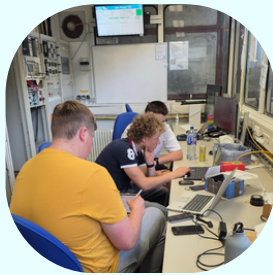
- Dan Vickery, Headteacher



Beamline for Schools Competition - WINNERS

We were incredibly fortunate to be the only UK school to win this (and only 5 from over the World). The Mobile_MIPs team, supported by Prof. Burdin from UoL Physics, went to Hamburg, to an electron accelerator (a source of synchrotron radiation) to test how to recycle old mobile phones into Cosmic Rays detectors for schools. They had the opportunity of working with world-class researchers who used their expertise to help them perform the experiment. After lots of problem solving and excellent team working skills, they discovered that building a 3D map of cosmic rays was too hard to do due to the background particles, but they saw really interesting 2D traces that may be developed into an app on its own for mobile phones to detect those particles. This wasn't an easy task. They had to design a holder that would put 10 mobile phones aligned to a mm scale, a cooling system to keep them cold enough to do the experiment, a reference LED circuit to help them calibrate the phones video signal and an app that would extract information about what exact pixel in what exact frame was actually detecting something. Even more curated researchers at a nearby X Ray research facility we visited (European X FEL) were speechless (and very envious!) when they heard the quality of what our students were trying to achieve at such an early age. Not to mention we learnt how to use fire extinguishers, deal with liquid nitrogen, solder electronic components and how to keep an amazing logbook of the work done.

- Aurora Gutierrez-Sosa, Head of Physics



Class of 2026 Awards Event:

We are planning on having the Class of 2026 Awards Event on Thursday 17th December 2026 from 2pm - 4pm.

The venue is yet to be confirmed but we hope to let you know as soon as possible! We also have plans for an alumni day and we will be in touch with all our ex-students very soon!

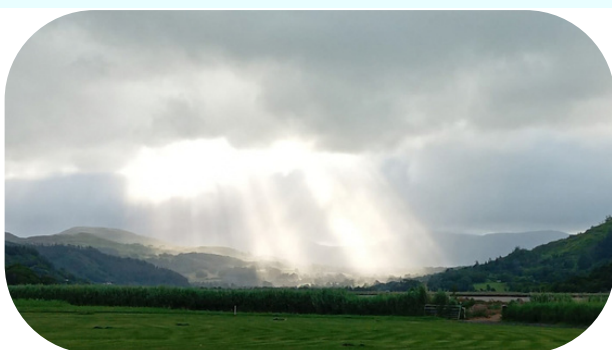
Duke of Edinburgh

15 Students in 3 groups completed the Gold Qualifying Expedition in Eryri at the start of July, assisted by Steve, Johnny and our mountain leader John. We were as always impressed by their resilience, good spirits, and obsession with cooking pasta and sauce.

They have all since completed their expedition presentations, on how they achieved their aims - researching the history of the area, making a 500 miles music video, and compiling a sketchbook of reflections.

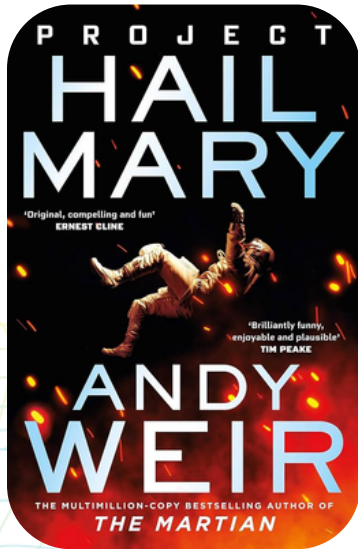
The new cohort are being recruited as we speak!

- Mike Prescott, Teacher of Mathematics and Duke of Edinburgh Co-ordinator





The extra bits at the end!



The book club are currently reading Project Hail Mary by Andy Weir. They chose this as they are all a fan of fiction and a few members have seen the film and have therefore been inspired to read the book. We wish them an enjoyable read!

Photography Competition Weekly Winners:



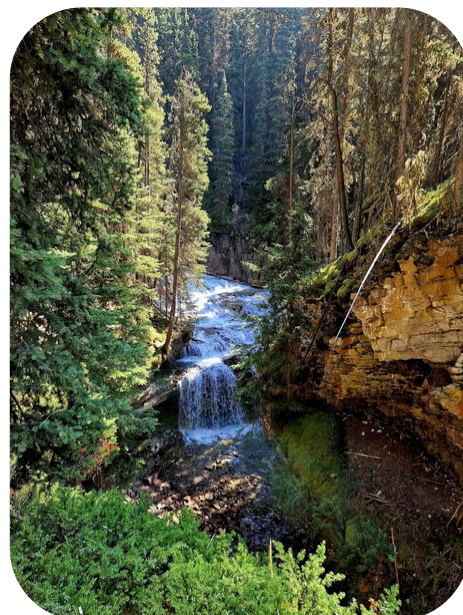
Asviya, Year 12
Stone Characters



Zayd, Year 13
Framing Home



Colin, our Head of Mathematics, also works with the Maths School network, U-Maths, as Projects Lead. In June he published the first edition of a magazine, Quarterly Enrichment Digest (QED), which contains articles written by current and former students from across the Maths School network, including 2 brothers who attended ULMaS. You can read the magazine [here](#)



Sam, Year 13
Into the Woods