



Teacher of Mathematics

King's College London Mathematics School

- Permanent
- Part or full-time (0.6-1.0FTE)
- Start date 1 January 2024
- Full-time salary £36,745-£47,665 depending on experience

Job pack contents:

- Application procedure
- Information about King's College London Mathematics School, and the post;
- Job description;
- Person specification.

Application Procedure

Should you wish to apply for this position please send the following:

- A completed application form, and
- An Equality and Diversity reporting form

Links to these documents can be found on our [website](#).

You may include a curriculum vitae and/or covering letter as well as, but not in place of, the application form.

Applications should be made electronically in Word or PDF format by email to kclmsvacancies@kcl.ac.uk. Enquiries may be made to Tom Collins, Deputy Head, using the same email address.

Closing date: 09:00 on Mon 9 October 2023

Interviews will be held on: Friday 13, Monday 16 or Tuesday 17 October 2023

Please advise your referees that they may be contacted and asked to provide a reference at short notice.

King's College London Mathematics School (KCLMS)

<https://www.kingsmathsschool.com/>

King's College London Mathematics School is for students with a particular aptitude and enthusiasm for mathematics, and aims to widen participation in mathematical degrees and careers at the very best institutions. The state-funded school was opened in September 2014 by King's College London, and since then its students have consistently achieved unparalleled attainment and progress through A Level results that have established the school as the top performing school in the country. Following the school's success, maths schools are now being opened by universities across the UK. The school was recently awarded State Sixth Form School of the Decade by The Sunday Times.

The curriculum

Our aim for the curriculum is for it to not only ensure excellent progress and attainment at A-level, but also to prepare students for successful further study and careers in the mathematical sciences.

All students at the school take Mathematics, Further Mathematics and Physics to A-level, and either Computer Science or Economics to AS-level. They also take part in an extended curriculum that develops research, independence, literacy and communication skills, and that encourages the development of interests and of a healthy lifestyle. The school's educational ethos involves supporting students' future fulfilment by enabling confident self-expression both within and without our curriculum.

Students are prepared throughout their time at the school for the most challenging qualifications at sixth form level, including the STEP (Sixth Term Examination Paper, set by the University of Cambridge). They are also prepared to enter the many individual challenges and team competitions that are available in mathematics, physics and computer science.

The link to King's College London

King's College London is one of the top 10 universities in Europe (*Times Higher Education World University Rankings 2020*) and the fourth oldest in England. It is the sponsoring organisation for KCLMS, and the university maintains strong strategic and operational links with the school. Strategic oversight is provided by the university through the school's governance structures, and academics from the faculty of Natural, Mathematical and Engineering Sciences interact with KCLMS students by teaching extension programmes and mentoring groups of students working on extended research projects.

Site and Size

The school is located on Lambeth Walk, near to the Imperial War Museum and a short walk from King's College London's Waterloo campus. The school has 150 students split between year 12 and year 13.

Admissions Policy

KCLMS operates a selective admissions process. The key entry requirements are:

- At least seven GCSEs at grade 5-9, including: Mathematics (grade 8 or better), Physics or dual award science (grade 7 or better), and English Language (grade 5-9);
- A threshold score in a mathematical entry test set by KCLMS;
- A successful interview in which the school will further assess applicants' ability to benefit from the experience of attending a specialist mathematics school.

The school is committed to recruiting a significant proportion of students from socially and financially disadvantaged backgrounds, and to an outreach programme to further this objective.

Outreach

KCLMS aims to be a centre of excellence for the teaching of mathematics and its applications. The school supports high-attaining students across London, and in particular those who come from more disadvantaged backgrounds, to develop their mathematical skillset, and also works with teachers to provide professional development around the teaching of Mathematics and Further Mathematics A Levels.

Why work for King's Maths School?

At King's Maths School we are proud to be an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees. Benefits include:

- Being part of a small, knowledgeable, and fun team.
- The opportunity to work with young people who are deeply curious, focused, and ambitious.
- A highly collaborative work ethos including weekly group lesson planning.
- A progressive staff wellbeing policy that includes access to an in-school counsellor.
- Better than industry standard family leave benefits, including for adoption and surrogacy.
- 3 flexible holidays days per year that can be used during term-time to go to events or opportunities that would otherwise be difficult for teachers to attend.
- More holiday allowance than other state schools.
- A later start, with lessons commencing at 09:15.
- A cycle to work scheme (we have staff changing and shower facilities on site), educational discount at the Apple Store, access to King's College London's research, learning and prayer facilities, and subsidised KCL gym use.
- Opportunities to attend a range of cultural events for free as part of our cultural programme, including theatre shows, orchestra performances, sporting events, art galleries and museums.
- A bean to cup coffee machine – we know the importance of caffeine!

Teacher of Mathematics

The school is seeking to appoint a passionate and inspirational teacher of mathematics to work in a unique and talented department to realise the vision and ambitions for the school. The post may be either part-time or full-time, ranging from 0.6 to 1.0 FTE (full-time equivalent), i.e. 3-5 days per week. Candidates are asked to state their preference or range of flexibility in the application form.

Mathematics lies at the core of everything that takes place at King's College London Mathematics School; it is the passion that unites teachers and students alike, and it represents a way of thinking and creating that empowers and enriches all the different aspects of the school curriculum. Whilst the school has many high-attaining students, the department does not accelerate through A-level material to focus on university level content, but instead teaches in a way that develops effective mathematical thinking. The aim is to provide students with not only a powerful set of tools but also the ability to use those tools flexibly and creatively, to help them internalise an understanding of each idea and of the connections between those ideas. The approach taken employs a greater rigour than would usually be expected at this level, with a general supposition that statements are proved and methods justified. In lessons, teachers focus on the use of Socratic questioning to test and develop understanding, on carefully structured problems to provide effective learning experiences for students, and on the frequent use of the whiteboards that surround all our classrooms to develop a culture of collaborative enterprise.

The mathematics department consists of twelve well-qualified mathematicians and is highly collaborative. In addition to a weekly department meeting, there are weekly sessions for each of the core, mechanics and statistics sections of the curriculum dedicated to planning. A level performance is exceptionally high: 91% of Mathematics grades and 88% of Further Mathematics grades were A or A* grades in August 2023. Approximately 50% of all graduating students go on to study mathematics at competitive universities, with Cambridge, Warwick, Oxford, Imperial and Bristol being the most popular destinations last year.

The successful candidate will have strong academic credentials. They may already have a proven record of outstanding teaching, or they may be new to the profession, in which case they would be supported by the school's thorough mentoring programme. The school is interested in candidates who are also equipped to teach A Level Physics, for example someone who has a degree in Physics but has trained as a mathematics teacher.

The post will commence from 1 January 2024.

Job description

Post title	Teacher of Mathematics
Responsible to	Head of Mathematics

Role outline

The Teacher of Mathematics will be responsible for preparing and teaching high quality lessons, ensuring the academic progress of their students, promoting the subject more widely and encouraging further study of mathematics in higher education. They will take charge of the care, guidance and support of a tutor group, and will work collaboratively with all staff to realise the vision of the school, including by working on the school's outreach programme.

Summary responsibilities and Activities

As a Mathematics Teacher:

- To support the school in developing an inventive approach to teaching, learning and assessment in mathematics so that all students are challenged effectively and enabled not simply to get high grades but also to gain an excellent understanding of the subject which propels them into successful further study.
- To teach mathematics to KCLMS students, maintaining outstanding standards of teaching and learning.
- To teach mathematics on KCLMS outreach programmes.
- To prepare appropriate resources for lessons and provide academic support for students in and out of their lessons
- To provide feedback on students' progress to the school, to parents/carers and to students themselves; to provide or contribute to written assessments, reports and references relating to individual students and groups of students.
- To participate fully in the learning community of KCLMS teachers, for example by regularly observing colleagues and welcoming observations in return, by contributing enthusiastically to discussions around teaching and learning.

As a tutor:

- To take responsibility for the care, guidance and support and the academic monitoring of a tutorial group, to include tracking and reporting on students' attendance and their academic, social and personal development.

As a member of staff:

- To contribute to a programme of after-school and lunchtime academic enrichment and co-curricular activities, which may sometimes require reasonable evening or weekend commitments, some of which will be offsite.
- To participate in recruitment events such as Open Evenings, Taster Days and Interview Days, some of which take place on weekday evenings or at weekends; to lead or assist offsite trips and visits
- To contribute to the establishment and maintenance of a caring, positive, safe and stimulating environment for each student at KCLMS.
- To provide cover for absent colleagues, and participate in arrangements for students' supervision during public examinations.
- To undertake any other duties which may be reasonably required by Senior Leaders.

Person specification

Eligibility to work in the United Kingdom

The advertising of this post has not been compliant with UKBA guidelines for candidates who need to apply for a Certificate of Sponsorship to work in the UK.

We don't want potential candidates to be put off if they believe they do not meet every one of the criteria as described in a job description. We are most interested in finding the best candidate for the job, and that candidate may be one who comes from a less traditional background. ***We would encourage you to apply, even if you don't believe you meet every one of our criteria described.***

Criteria	E S S E N T I A L	D E S I R A B L E	HOW IDENTIFIED AND ASSESSED AP Application I Interview R References TL Taught Lesson
Education/qualification and training			
Excellent grades in A-level Mathematics and Further Mathematics, or equivalent qualifications	X		AP
Good honours degree in Mathematics or in a subject where a significant proportion of courses were in abstract mathematics	X		AP
Qualified Teacher Status		X	AP
PGCE		X	AP
Experience			
Recent teaching experience of mathematics to high-attaining students aged 16-19		X	AP, TL, R
AS and A2 level Mathematics and Further Mathematics teaching		X	AP, TL, R
Preparing students for university entrance in Mathematics, including supporting UCAS applications		X	AP, I
Preparing students for mathematical extension papers (STEP, MAT, AEA)		X	AP, I
Care, guidance and support as a pastoral tutor in a school		X	AP, I, R
Knowledge/skills			
Precise and analytical self-reflection	X		I, TL
The depth of knowledge and the mental agility to allow flexibility in lessons	X		I, TL
Ability to quickly create effective rapport and a constructive relationship with students	X		TL
Excellent communication skills, both written and verbal	X		AP, I
Excellent organisational skills, including keen attention to detail	X		AP, I
Excellent IT skills, including the ability to learn new systems quickly and use them intelligently and flexibly	X		AP, I
Knowledge of the needs of SEN(D) learners, in particular learners with high-functioning Autism / Aspergers		X	AP, I

Personal characteristics/other requirements			
Commitment to the educational vision and the mission of King's College London Mathematics School	X		AP, I
Profound and continuing interest in the subject(s) to be taught	X		AP, I
Profound and continuing interest in learning, teaching and assessment	X		AP, I
Commitment to own self-development	X		AP, I
Capacity to take initiative and to innovate	X		AP, I
Ability to lead and to enthuse others	X		AP, I
Ability to work constructively with others inside and outside the school	X		AP, I
Integrity and reliability	X		AP, I

Safeguarding

King's College London Mathematics School is committed to safeguarding the welfare and well-being of children and applicants must be willing to undergo child protection screening appropriate to this post, including checks with past employers and the Disclosure and Barring Service.

Equal opportunities

Our staff are amazing – they inspire students, have great ideas, and help make King's Maths School a fantastic place to work. We are committed to ensuring that we are always recruiting, retaining, and promoting a diverse mix of colleagues because we know that for our students to succeed they need a staff body with a broad range of ideas, skills, and experiences.

Applicants with disabilities

King's College London Mathematics School is keen to increase the number of disabled people it employs. We therefore encourage applications from individuals with a disability who are able to carry out the duties of the post. If you have special needs in relation to your application, please contact the Business Manager, Nicola Cosgrove, by emailing nicola.cosgrove@kcl.ac.uk

Thank you for your interest in King's College London Mathematics School.