

Teacher of Physics- 5-month fixed term contract

King's College London Mathematics School

- Temporary
- Part or full-time (0.8-1.0FTE)
- Start date 1 January 2025
- Full-time salary £38,766-£50,288 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 <u>kclmsvacancies@kcl.ac.uk.</u> Enquiries may be made to Tom Collins, Deputy Head, using the same email address.

Closing date: 09:00 on Friday 8 November 2024 Interviews will be held on: arranged as applications are received

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 Physics**

The school is seeking to appoint a passionate and inspirational teacher of physics to work in a talented department to realise the vision of the school. The post may be either part-time or full-time, ranging from 0.8 to 1.0 FTE (full-time equivalent), i.e. 4-5 days per week. Candidates are asked to state their preference or range of flexibility in the application form.

# The post is offered as a temporary 5-month contract. It is likely that permanent role will become available before or during the contract. We welcome expressions of interest into this post at the same time.

Physics at King's College London Mathematics School is unique: not only does every student study this subject, but every student also takes Mathematics and Further Mathematics A-levels, meaning that topics can be tackled using considerably more mathematics than is usually assumed. The vision is for mathematics to be used to develop ideas, investigate problems and make verifiable predictions. The school is also interested in candidates who are equipped to teach mathematics to students at KCLMS, or whose knowledge of mathematical physics might enable them to lead the challenge and extension programmes developed and implemented by the physics department.

Physics is a central aspect of the school's core curriculum and is thriving at the school: A Level results in August 2023 featured an impressive 77% A\* grades and 97.5% A\*/A grades, there are many students who wish to apply to study it at top universities, there are keenly attended Physics and Robotics clubs, and a considerable proportion of students choose to enter the AS and A2 Physics Challenges. The Physics department consists of five well-qualified physicists, in a combination of full-time and part-time roles, and is highly collaborative. The school has two modern, well-equipped science laboratories, a design laboratory featuring an extensive workshop as well as a laser-cutter and 3D printer, a spacious prep room, and support from a part-time technician.

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. A vital qualification will be that they share the vision of the school to help young people with a particular aptitude for mathematics find stretch and excitement in a curriculum that fosters intellectual growth and curiosity.

The post will commence from 1 January 2025.

# Job description

Post title	Teacher of Physics
Responsible to	Head of Physics

### **Role outline**

The Teacher of Physics 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 physics and engineering 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 Physics Teacher:

- To support the school in developing an inventive approach to teaching, learning and assessment in physics 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 physics to KCLMS students, maintaining outstanding standards of teaching and learning.
- To teach physics 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 E N T I A L	D E S I R A B L E	HOW IDENTIFIEDAND ASSESSEDAPApplicationIInterviewRReferencesTLTaught Lesson
Education/qualification and training		•	
Excellent grades at A Level or equivalent qualifications	Х		AP
Good honours degree in Physics or in a closely related subject	х		AP
Qualified Teacher Status		Х	AP
PGCE		Х	AP
Experience	,	<u>.</u>	
Recent teaching experience of physics to high-attaining students aged 16-19		Х	AP, TL, R
A Level Physics Teaching		Х	AP, TL, R
Preparing students for university entrance in Physics, including supporting UCAS applications		х	AP, I
Preparing students for physics extension papers (PAT, Physics Challenge, Physics Olympiad)		х	AP, I
Care, guidance and support as a pastoral tutor in a school		х	AP, I, R
Knowledge/skills	,	Į	
Precise and analytical self-reflection	Х		I, TL
The depth of knowledge and the mental agility to allow flexibility in lessons	Х		I, TL
Ability to quickly create effective rapport and a constructive relationship with students	х		TL
Excellent communication skills, both written and verbal	х		AP, I
Excellent organisational skills, including keen attention to detail	Х		AP, I
Excellent IT skills, including the ability to learn new systems quickly and use them intelligently and flexibly	х		AP, I
Knowledge of the needs of SEN(D) learners, in particular learners with high- functioning Autism / Aspergers		х	AP, I
Personal characteristics/other requirements			
Commitment to the educational vision and the mission of King's College	Х		AP, I

London Mathematics School		
Profound and continuing interest in the subject(s) to be taught		AP, I
Profound and continuing interest in learning, teaching and assessment		AP, I
Commitment to own self-development	x	AP, I
Capacity to take initiative and to innovate		AP, I
Ability to lead and to enthuse others		AP, I
Ability to work constructively with others inside and outside the school		AP, I
Integrity and reliability		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 by emailing <u>KCLMSbusinessmanager@kcl.ac.uk</u>

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