Chelmsford County High School for Girls

Inspiring the leaders of tomorrow to think for themselves and act for others

Subject Leader of Computer Science

We will also consider applications from those who wish to teach Computer Science but not lead the Department

Full-time position, commencing September 2022

(an alternative start date will be considered)

Suitable for an Experienced Teacher, Early Career Teacher or

a Computer Science Graduate who wishes to train with us

Salary: M1 £25,714 to UPS3 £41,604 per annum

UQ1 £18,419 to UQ4 £24,507 (for Graduate trainee)

TLR2b (£4,944) allowance for Subject Leadership responsibilities

School visits encouraged, in advance of applying

Contents

May 2022

Dear Prospective Applicant

Appointment of: Subject Leader of Computer Science / Teacher of Computer Science

Thank you for requesting information about the above post. Should you decide to apply and be successful you will be joining a school which, from your first visit, will strike you as vibrant, bursting with energy and enthusiasm, and above all a very happy school that celebrated its Centenary Year in 2007. You will also find it useful to visit the school website www.cchs.co.uk.

We are rated as an "outstanding" school, a badge we are proud to hold and which applies to all areas of the School's activities.

Chelmsford County High School for Girls has been a single academy trust since 2011. This status offers us a range of opportunities to pursue academic goals whilst running the school as a limited company. The School expanded to 6 forms of entry in September 2020 in response to increasing demand for grammar school places in the area and over 1,300 girls sit our entrance test each year. Expansion will be completed by 2024 and we expect our Sixth Form to grow as a result.

The School was awarded a substantial Government grant in 2018 which was conditional on the School developing its existing strategies of working with local primary schools to encourage and support girls from disadvantaged backgrounds sitting our entrance test and securing a place. To that effect we have amended our Admissions Policy and committed to reserving up to 30 places for girls in receipt of Pupil Premium and Free School meals whose results fall within the top two bands.

Our school is led by a strong team of senior staff and governors who are constantly striving for excellence, seizing all opportunities for the benefit of our students and our staff.

We are seeking to appoint a person with the skills, knowledge and experience to complement the team of teachers and leaders. Above all, we are looking for a committed individual with a genuine interest in providing the highest quality in every aspect of the role. Our students deserve the very best we can provide. We believe in the importance of a collaborative approach and a commitment to the team. The successful applicant will benefit from a wide range of experience at our school and above all enjoy working with us.

Thank you for your interest. If you feel that Chelmsford County High School for Girls can provide the challenges and opportunities you are looking for then we would be delighted to hear from you.

Yours faithfully

Stephen Lawlor
Headteacher

STUDENTS

Chelmsford County High School is a great place to work with a caring ethos – our students are motivated, pleasant, courteous, well-behaved and enormous fun! They like school, and enjoy learning, achievement is high, and almost all the students go on to Higher Education at the most competitive universities, including Oxford and Cambridge.

THE SCHOOL

Chelmsford County High School was founded in 1906 as one of the first girls' secondary schools in Essex. In an area where most other schools are all-ability comprehensives, it is a selective grammar school with academy status.

In September 2020, we expanded our intake for Year 7 admitting 180 students per year alongside the 150 students in Year 12. Most of our students in Year 11 return for the Sixth Form, and some 30-40 students join Year 12 from other schools. Entry at Year 7 is highly competitive: in accordance with our Admissions Policy we offer places to the 180 girls who meet our criteria, out of the 1,300 or more who sit the entrance test. The School has a large number of "feeder" primary schools, around 80 in any one year group! Entry into the Sixth Form is determined by a strong performance at GCSE, which suggests good potential in the subjects chosen for A Level. At present, there are 1115 students on roll with 303 in the Sixth Form. Our students follow a broad curriculum with equal value attached to each subject area. We are working towards an Artsmark Gold Award, which celebrates the emphasis we put on creativity across the curriculum.

This is not a complacent school. We regularly review our practice, and ensure that classroom methodology is appropriate to the needs of our students. All staff have the opportunity to contribute to whole school planning for improvement through their subject and year teams as well as focus groups, each led by a member of the Senior or Middle Leadership Team.

This is a very busy school, which places a strong emphasis on enrichment activities. There is a fine tradition of musical performance, and most students play at least one instrument. There are many orchestras, choirs and ensembles. Drama is also an important enrichment activity,

with clubs, and major school productions involving many students. Our sports teams are very successful, as are our individual sportswomen. Our students are lively and talented, as well as being academically able, and we try to provide plenty of opportunities for them. They also run a wide range of clubs or societies such as the Law Society and Medical Society where they invite speakers or present papers themselves. House activities include some distinctly less serious events, which nonetheless challenge student ingenuity. As a girls' school we challenge gender stereotypes and place great importance in presenting our students with a wide range of opportunities beyond the taught curriculum, this includes involvement in many STEM activities and competitions.

In terms of resources and buildings, we have a fine mixture of "traditional", provided by the original main building, and a variety of buildings dating back to different decades of the last century together with some excellent modern facilities, such as the Music and Languages Centres. There is good computer provision, including interactive whiteboards in every classroom. We have dedicated Sixth Form facilities, a drama studio, an all-weather artificial pitch and a lecture room where we run a programme of academic lectures. In September 2021 we opened a new Sports Hall with dance studio and fitness suite, and a new teaching block containing additional science laboratories and classrooms.

Governors are highly committed individuals who are generous with their time and the expertise they bring to the School. Parents are very supportive individually or through the Parents' Association, and have, obviously, very high expectations of the School. We have a strong school community, which is friendly and welcoming. We trust our students to behave well, and the atmosphere in the School reflects our high expectations of them in this respect.

STAFF

- ❖ The School currently has a **teaching establishment** of 40 full-time and 27 part-time staff.
- ❖ There is a **non-teaching establishment of** 46 Support Staff most of whom are part-time, who support teaching and learning in various capacities.
- ❖ **New Staff Induction Programme –** new colleagues benefit from a comprehensive programme of support and guidance from their Department and Pastoral teams.
- ❖ **Professional qualifications –** we offer teaching staff the opportunity to develop their knowledge and understanding of education by offering a contribution to the cost of a Master's degree or an NPQ course.
- ❖ **Continuing Professional Development –** we have well-established Professional Development Groups and School Development Groups, which provide staff with focused and personalised development programmes.
- ❖ **Leadership development –** we have devised and run the 'CCHS Leadership Programme' to enable colleagues to secure leadership experience, as well as develop their existing practice, to facilitate career progression.
- ❖ **Wellbeing –** we have a staff wellbeing group as part of a whole-school commitment to ensuring that all staff thrive in their professional roles.

❖ **Headteacher**   **Mr Stephen Lawlor**

❖ **Deputy Headteacher**   **Mrs Emma Matthews, Curriculum**

❖ **Assistant Headteacher**   **Mrs Jo Cross, Teaching & Learning and Staff Development**

❖ **Assistant Headteacher**   **Miss Fiona Harrison, Pastoral**

❖ **Assistant Headteacher**   **Dr Michael Palmer, Head of Sixth Form**

❖ **Business Manager**   **Mrs Melissa Mulgrew**

Developing confident, resilient and proficient digital citizens

"Every pupil should appreciate that computational ideas inform and illuminate other disciplines, and this should be reflected in the teaching of these disciplines at school. Like numeracy and literacy there is a cognitive strand of computing that offers valuable thinking skills to learners of all ages (e.g. algorithmics, logic, visualisation, precision, abstraction)." Computing At School (CAS), 2012.

The Department: Mrs N Khan, Subject Leader of Computer Science
Mrs N Lewis, Teacher of Computer Science

Line Manager: Mrs Jo Cross, Assistant Headteacher – Teaching & Learning

The Computing Department has been a long-established department consisting of two subject specialists supported by part time teachers. It is part of a faculty structure that includes Mathematics and Economics and links are strong with these departments, particularly Mathematics.

Extra-curricular activities are key for Computer Science and currently involve a visit to Bletchley Park exploring the topic of Cryptography. The trip has historically been very successful with excellent feedback received from the Year 8 cohort who take part.

At Key Stage 3 all students are taught in classes of 30 and participate in two hours of computer science a fortnight. Students are enthusiastic and engaged with the subject and delight in participating in external competitions. The Key Stage 3 programme reflects the topics students will need for Key Stage 4 Computer Science. At Key Stage 4 students are entered for the AQA GCSE Computer Science 1-9 examination (details included as an appendix). At Key Stage 4 we currently have three classes of highly able students in both Years 10 and 11 and as an expanding school we anticipate that these numbers will rise.

The enthusiasm of our students inspired us to offer the AQA A-level. The introduction of this course has been very successful and our numbers are steadily increasing every year.

There are currently two excellent, very large computing rooms; both are fully equipped with 31 modern PC's including a teacher computer connected to an interactive whiteboard. The rooms are air conditioned and share a commercial printer. Both rooms provide separate desk space for theory work away from the computers making them ideal for delivering all key stages of the Computer Science curriculum. Subject Prefects assist the department with Open Evenings, Options Evenings and club activities, such as the recent BBC Microbits and the NCSC CyberFirst Girls competition.

Department Ambitions

To provide opportunities that allow all students to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. To expose students to relevant content that allow them to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve problems. To encourage students to be critical and mindful of growth potential through evaluation and application of information technology, including new or

unfamiliar technologies, analytically to solve problems. All students should feel responsible, competent, confident and creative users of information and communication technology.

Entitlement

Each and every student will be supported fully in their learning regardless of background or individual needs. Students with SEND will be fully supported and accommodated through the use of specialist equipment where appropriate.

Key Knowledge and Broad Concepts

The computing curriculum at CCHS aims to teach the core principles of computer science, in which students are taught information and computation, digital systems and how to put this knowledge to use through programming. Students build on the knowledge of core computer science principles throughout Key Stage 3 to develop a strong understanding of the subject in preparation for the GCSE and A level syllabus. The content delivered to students in Key Stage 3 meets the expectation outlined in the [DofE national curriculum framework](). In addition, the CCHS curriculum has been designed to broaden our students' exposure, awareness and appreciation of the subject through extra-curricular opportunities.

Future

Students will be equipped to use computational thinking and creativity to understand and change the world. During the delivery of computer science lessons, students will be informed of the expectations of the subject in relation to their approach to learning, their development of knowledge and the skills they develop.

A Level Computer Science Specification Details

Examination Board: **AQA -**A level Computer Science (7517)

Derivation of Final Grade: **Paper 1:** On-screen exam: 40% - 2 hours 30 minutes - 100 marks

Paper 2: Written exam: 40% - 2 hours 30 minutes – 100 marks

Non-exam element: 20% - Programming Project – 75 marks

Course Details: This rigorous course truly reflects the essence of Computer Science. It reveals the subject to be an important, fundamental, academic, discipline underpinning other subjects. The course enables students to develop their problem solving skills, exercise their creativity and explore their interests. The A level exposes students to key programming paradigms, advanced data structures, traversal, search, sort and optimisation algorithms and their efficiency.

Paper 1: A01 Demonstrate knowledge and understanding of the principles and computer science, including abstraction, logic, algorithms and data representation. Focus is on designing, writing and testing of programs.

Paper 2: A02 Apply knowledge and understanding of the principles and concepts of computer science, including to analyse problems in computational terms.

NEA: A03 Design, program and evaluate computer systems that solve problems, making reasoned judgements about these and presenting conclusions.

GCSE Computer Science Specification Details

Examination Board: AQA – GCSE Computer Science (8525)

Derivation of Final Grade: **Paper 1:** Computational Thinking and Programming skills: Written examination - 50%- 2 hours

Paper 2: Computing Concepts: Written examination - 50% - 1 hour 45 mins

Course details: This exciting course explores the well-established methodologies of computing, alongside the technological advances which make it such a dynamic subject. A variety of teaching methods will be used, which will include: whole class teaching, flipped learning, practical work, self-study, demonstrations, discussions, typed notes and video clips of demonstrations. The course has a strong focus on developing problem solving skills that can be applied to many situations not just those found in Computer Science. Students will develop a strong base understanding of the fundamentals of programming in a high level programming language (Python) which can then be applied to other languages they may encounter in further education.

Paper 1: Computational Thinking and Programming skills: This unit covers computational thinking, problem solving, code tracing, programming concepts including the design of effective algorithms and the designing , writing, testing and refining of code.

Paper 2: Computing concepts: This unit covers theoretical themes such as cyber security, data representation, computer systems and networks, along with ethical, legal and environmental impacts. The paper has a strong focus on theory and understanding of the subject beyond programming skills.

Results: Results are excellent and reflect the ability and commitment of our students.

Teaching subject specialism classes and other subject classes as allocated by the Leadership Team.

PURPOSE OF THE JOB

To provide excellent teaching so all pupils achieve their potential within an atmosphere in which pupils feel challenged, valued and secure.

DUTIES

The School Teachers' Pay and Conditions Document (STPCD) specifies the general professional duties of a teacher. In addition, certain particular duties are reasonably required to be exercised and completed in a satisfactory manner.

PARTICULAR DUTIES

Under the overall direction of the Headteacher.

KEY FUNCTIONS

- Teach subjects allocated, including planning, setting homework, marking and assessment in line with school policies. Engage with school-wide learning initiatives. If appropriate.

- Ensure that excellent teaching and learning takes place in all allocated classes.

- Mark, assess, record and report on pupil achievement and maintain records as required. Maintain accurate records and use assessment data to monitor progress, targets and further action (e.g. SEN, Pupil Premium, Gifted and Talented, praise and under achievement).

- Contribute to the development of Schemes of Learning, programmes of study, and subject/year development plans, School and Team policies as appropriate.

- Maintain a purposeful, orderly classroom environment including neat storage, learning-centred display and by employing a range of assertive behaviour management strategies.

- Undertake specific duties within the Team as delegated after consultation with your line manager.

- Attend and contribute to appropriate meetings and professional development activities.

- Meet deadlines for reporting, marking and other assignments.

- Prepare pupils for examinations and take part in standardisation or moderating exercises as required by the Team or examination boards.

- Follow School Policy and support the Leadership Team in the effective operation of the school.

- Undertake the appropriate CPD, including lesson observation, and show its impact on teaching and learning.

OTHER SPECIFIC DUTIES:

- To engage actively in the performance review process.

- To undertake any other duty as specified in the STPCD not mentioned in the above.

- Whilst every effort has been made to set down the main duties and responsibilities of the post, each individual task to be undertaken may not be identified.

- Employees will be expected to comply with any reasonable request from a manager to undertake work of a similar level that is not specified in this job description.

- This Job Description is current at the date shown, but, in consultation with you, may be changed by the Headteacher to reflect or anticipate changes in the job commensurate with the grade and job title.

It is important that your application should address and evidence each of the criteria of the specification by means of a supporting statement in accordance with your experiences and aspirations so far.

SKILLS AND ABILITIES

- A proven track record as an outstanding classroom teacher.
- First-class planning, assessment and record-keeping.
- A proven record of raising standards and of initiating and maintaining innovative curriculum design and delivery.
- Excellent problem-solving skills.
- Excellent ICT skills.
- Highly competent subject Teacher.
- A commitment to celebrating students' achievements, skills and talents, as well as an ability to tackle problems effectively.

KNOWLEDGE AND EXPERIENCE

- Excellent subject knowledge.
- A detailed understanding of all current educational initiatives which apply to the subject.
- Recent teaching experience (or appropriate training) with secondary age students.
- An understanding of Health and Safety issues within an educational setting.

GENERAL ATTRIBUTES

- Excellent written and oral communication skills.
- Strong leadership skills with an ability to develop and maintain positive relationships with students, colleagues and parents.
- An ability to work effectively under pressure.
- A commitment to extra-curricular activities and to the school's involvement in the wider community.
- Good sense of humour.
- A flexible approach to tasks.
- A willingness to contribute to whole-school initiatives.
- A commitment to networking and the sharing of best practice.

PROFESSIONAL QUALIFICATIONS AND TRAINING

- A first degree in a subject relevant to the teaching post.
- A DfE recognised teaching qualification.
- A commitment to the continuing professional development of all members of the Department.
- A commitment to further professional development.

To apply for this role, please submit a completed application form supported by a letter addressed to Mr Stephen Lawlor, Headteacher, outlining what you would bring to the post, addressing the Person Specification and the Role Description.

Please give the names, positions, organisations and telephone contact numbers of two referees, one of whom must be your current or most recent headteacher. Referees will be contacted prior to interview, unless you specifically state otherwise. **Referees should be from different organisations.**

Please also complete and return the Equal Opportunities Monitoring Form, which is included with the Application Form. This will help us to follow the recommendations of the Equal Opportunities Commission, the Commission for Racial Equality and the Disability Rights Commission that employers should monitor selection decisions to assess whether equality of opportunity is being achieved. The information on this form will be treated as confidential and used for statistical purposes only. This form will not be treated as part of your application and will not be seen by anyone involved in the selection process.

Finally, please ensure that you have included work, mobile and home telephone contact numbers and an email address. Please also indicate any dates when you will not be available for interview.

Applications should be sent to Miss Helen McGrath**, for the attention of Mr Lawlor by email: hmcgrath@cchs.essex.sch.uk**

Situated just 30 miles northeast of London, Chelmsford is the perfect base, with excellent road, rail and air communications. The A12 runs to the east of the town, meeting the M25 near Brentwood, with London's Liverpool Street railway station, and Stansted Airport 30 minutes away, respectively. From a bustling town centre with excellent shopping and eating facilities, to tranquil villages, unspoilt countryside and coast, Chelmsford is the perfect combination of city and country.

Chelmsford took the top spot in the 2018 Sunday Times Best Places to Live guide. In the guide, which ranks towns on factors including jobs, broadband speed, culture, community spirit and local shops, Chelmsford ranked Best Place to live in the East as it is also home to several excellent state schools, and the Anglia Ruskin University.

Despite redevelopment in the past 30 years, Chelmsford retains many glimpses of its past. It was awarded City status in 2012. Mentioned in the Census of 1086 as two settlements beside the River Can, later joined by a bridge, it became the County town in 1250. The Blackwater and Chelmer Navigation Canal opened in 1797, linking the town to the coast, and the railway came in 1843. Chelmsford is the renowned birthplace of radio; Marconi began broadcasting in 1895, and the city has attracted major names in the business world ever since.

The town centre benefitted from some investment recently with John Lewis, and many more high-class shops located in the new Bond Street.

Subject Leader of Computer Science

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Salary: M1 £25,714 to UPS3 £41,604 per annum (for Qualified Teacher)

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TLR2b (£4,944) allowance for Subject Leadership responsibilities

School visits encouraged, in advance of applying

Chelmsford County High School for Girls is one of the most successful girls' selective schools in the country. An exciting opportunity has arisen to take a leading role in further developing and delivering A level Computer Science, working with our able and motivated students. Computer Science is taught throughout Key Stage 3 and is now a very popular GCSE course. We want to offer our students the opportunity to continue their studies in this important subject as they move into the Sixth Form.

The position would be ideal for an experienced well-qualified teacher or an Early Career Teacher. We also offer a Computer Science graduate the opportunity to train with us, which is a great opportunity to be paid as you train.

The Governing Body is committed to safeguarding and promoting the welfare of children and young people and expects all staff to share in this commitment. The post is subject to an enhanced DBS Clearance.

For an application pack please visit the School website www.cchs.co.uk and return completed applications, with a covering letter addressed to Mr Lawlor, Headteacher, to Miss Helen McGrath: hmcgrath@cchs.co.uk