

# King David High School

# Applicant Information Pack

Teacher of Computer Science



## **Welcome from the Chair of Governors**

## Dear Applicant

On behalf of the governing body of King David High School Liverpool, thank you for considering this post and we believe it will offer the successful candidate a rewarding opportunity.

The King David school community is strong with a firm commitment to Judaism at its heart. As a faith-based school we pride ourselves on togetherness, yet at the same time recognising diversity and inclusivity.

At King David we strive for improvement at all levels and for staff and pupils to be happy, successful and to embody our school motto "let there be life through faith and work."

We welcome applications from caring professionals who wish to engage with what we refer to as the "King David Way" and, on behalf of the governing body, I wish you every success should you decide to submit an application.

Best wishes

Michelle Hayward



## **Welcome from the Headteacher**

Dear Applicant

Thank you for your interest in this position at King David High School. I am very proud to be the Headteacher of this school and would like to introduce you to our community.

King David is a truly unique place. We are at the heart of our local community. It is enriched by the wide variety of different people who make up our school. Our students, who are eager to learn, our staff, who have great skill and experience and the wider community of parents and local people who all contribute to our school.

As a group we aim to be a 'Kehilla', which is the best type of community, where every individual is recognised and appreciated by everyone else and everyone makes their full contribution to the whole. Our motto is, "Let there be Light through Faith and Work".

I am looking to appoint people who want to add their skills to the school to make us even stronger.

Our academic reputation is of the highest standards and we are keen to raise this higher wherever possible. We rely on working together, with integrity, honesty and commitment.

The King David Way describes our outlook:

To always strive for improvement

For staff and pupils to be happy and successful

I look forward to hearing from you.

Best wishes
Michael Sutton



# **Department Overview**

The Computer Science department offers a worthwhile and stimulating range of learning experiences. The members of the department work as a team. Colleagues share a common purpose, we work to the same schemes of work, but staff develop their individual approaches and bring their own styles and knowledge to the subject. The members of the department support one another and share ideas in an ongoing dialogue, both formally at meetings and informally on a day-to-day basis. This creates a positive atmosphere and gives a real sense of commitment and purpose to the delivery of the subject.

The aim or vision of the computing department is to provide an outstanding computing programme that inspires learners at every key stage. While academic results are important (and we are proud of our record), our broader aims are to continue to deliver a robust and inclusive computing programme whilst continuing to identify new technologies and opportunities by looking ahead at developments in the field and the opportunities this provides for future students.

The successful applicant will be expected to teach Computer Science in Key Stage3, 4 and 5 and we would hope they become involved in extracurricular initiatives developed by the department too. We would expect therefore, that the successful applicant is a Computer Science specialist, qualified to good degree standard.

The department is structured around 2 full-time, permanent posts and we also have staff from other departments to teach to Key Stage 3 level. Computer Science is part of the Creatives Faculty and, as such, there is a collaborative approach to teaching and learning shared amongst Art, Business and Economics, DT, Music and PE. We have 3 dedicated computer suites and further access to computers throughout the school for independent student study.

KS3 is taught to mixed ability groups through year 7, 8 and 9 before options are taken. The year 7 programme of study covers E-Safety, File Management, the school network, how to use email, technology, modular programming in scratch, Python programming (beginners), spreadsheets and graphics editing. The year 8 programme of study teaches Python Next Steps, MS Office and Research techniques, spreadsheet analysis, Databases, Instruction set design using Microsoft Kodu and "Adventure story" using PowerPoint and hyperlinks. The year 9 programme of study consists of Computer Networks, Web design in Dreamweaver, Python Next Steps, AI and Machine Learning, Computer Ethical, legal, cultural, environmental impacts and the Lake Garda research project using Microsoft office applications.

At KS4 learners are taught the GCSE J277 OCR exam specification and cover a variety of topics across the two components. Component 1 introduces students to the central processing unit (CPU), computer memory and storage, data representation, wired and wireless networks, network topologies, system security and system software. It also looks at ethical, legal, cultural and environmental concerns associated with computer science.

Students then apply knowledge and understanding gained in component 1. They develop skills and understanding in computational thinking: algorithms, programming techniques, producing robust programs, applying computational logic and understanding the role of translators. Students are also provided with the opportunity to undertake programming task during their course of study which allows them to develop their skills to design, write, test and refine programs using a high-level programming language. Students will be assessed on these skills during the written examinations, in particular component 2. Students are then examined on both components with 50% weighting on each paper towards their final qualification.

Key Stage 5 A Level (OCR H446 Specification) covers two components, Component 1 begins with Computer systems where students are introduced to the internal workings of the (CPU), data exchange, software development, data types and legal and ethical issues. The resulting knowledge and understanding will underpin their work in project work in component 3. Component 2 builds on component 1 to include computational thinking, programming techniques and problem-solving.

Students also have the opportunity to complete a programming project. Students are expected to apply the principles of computational thinking to a practical coding programming project. They will analyse, design, develop, test, evaluate and document a program written in a suitable programming language. The project is designed to be independently chosen by the student and provides them with the flexibility to investigate projects within the diverse field of computer science.

Candidates sit two exams and their project work is worth 20% of their final mark. The final weighting is outlined below:

Computer systems (1) 40% Algorithms and programming (2) 40% Programming Project (3) 20%

Extra-curricular activities are regularly arranged and are regarded as an extension of the department's teaching work. The pupils respond enthusiastically to any opportunity offered. We run a number of extracurricular clubs including the popular computer club for KS3, computing workshops to support exam students with their studies along with programming skills workshops to allow pupils to develop their problem solving skills and realise their full potential to give everyone the opportunity to succeed.

If you require any further information, please contact Chris Horsfield, Subject Leader for Computer Science.



# Our School Vision

King David High School is a mixed voluntary aided Jewish secondary school with a comprehensive intake. It exists to provide a Jewish, high quality academic and secular education for Jewish pupils as well as pupils from other faiths in the locality.

"Excellence in lifelong education for the Jewish and wider community by collaboration with other schools and the whole community"

#### King David High School aims to:

provide a stimulating and enriching Jewish and secular education for all Jewish children in Liverpool and its surrounding area.

provide an equally stimulating and enriching curriculum for all other pupils of all faiths admitted to the school.

provide a quality inclusive academic education for all pupils regardless of ability with the individual needs of each pupil at the heart of the Jewish ethos of the school.

We aim for our pupils to display and develop skills which show:

- A sense of belief and belonging through the Jewish faith based nature of the school.
- Respect and tolerance towards others within an ethos which values the contributions of all
- Appreciation of a multicultural society by cultivating a pride in their own culture and religion as well as an interest and respect for the culture and religion of others
- A sense of community and collective responsibility through curricular and extra-curricular activities
- Understanding of each other's differences regardless of faith, ability, gender, sexual orientation or disability
- Understanding of and responsibility for ensuring a safe and caring environment for all members of our community
- Nurturing of self-reliance and self-discipline
- Recognition, appreciation and celebration of the achievement of others
- Ability to reach their full potential in all aspects of school life
- Recognition of the value of lifelong learning
- Leadership and the potential to be valued citizens of the future
- Self -esteem and confidence enabling awareness of opportunities and progression through the key stages
- Positive responses to and participation in theatre, music, art, drama,
   sport and cultural activities
- Awareness of spiritual, moral, social and cultural sensitivities

# **Application Process**

# Further information about the school is available on the school website at www.kingdavidliverpool.co.uk

#### **Application Process**

- 1. Complete the application form accompanying this document or available on our website. Use the job description and personal specification to assist in populating all sections of the application form
- 2. Include a supporting statement of no more than 1,300 words detailing why you believe your experience, skills, personal qualities, training and/or education are relevant to your suitability for the post advertised and how you meet the person specification. This can be attached as a separate letter
- 3. Complete and return the Equal Opportunities Monitoring Form
- 4. Return the application form in either Word or PDF to appointments@kingdavidliverpool.co.uk

#### **Interview Process**

- 1. If your application is shortlisted, you will be notified by e-mail and invited to attend for interview. You will be asked to complete and return a Criminal Records Declaration Form prior to interview
- 2. Following our invitation, we will contact your referees, unless you have expressly indicated that we should not contact them at this stage.
- 3. Candidates will be notified of the outcome of the interviews soon after by phone. All offers are conditional upon meeting statutory criteria, including successful preemployment checks.
- 4. Unsuccessful candidates may request feedback which can be provided upon request.

# **Staff Benefits**

We are committed to staff wellbeing and can offer benefits including:

- ➤ Membership of the teacher pension scheme
- > Staff Wellbeing scheme provided by Smart Clinic (includes access to services such as physiotherapy and counselling)
- > Cycle to Work scheme
- > Enhanced Medicash scheme
- > Free parking
- > On-site canteen