



APPOINTMENT OF

TEACHER OF DESIGN & ENGINEERING



FULL TIME OR PART TIME FROM SEPTEMBER 2024



HAMPTON SCHOOL

Hampton is one of the country's leading, most successful and best-resourced independent schools and has been helping boys to fulfil their potential and realise their aspirations for over 460 years.

We are a lively, friendly and caring School community, in which innovative teaching is underpinned by strong shared values and complemented by outstanding pastoral care. We aspire to enable our boys not only to make sense of the world but also to want to go out and improve it. Hamptonians are expected to aspire to personal best while supporting those around them with kindness and respect.

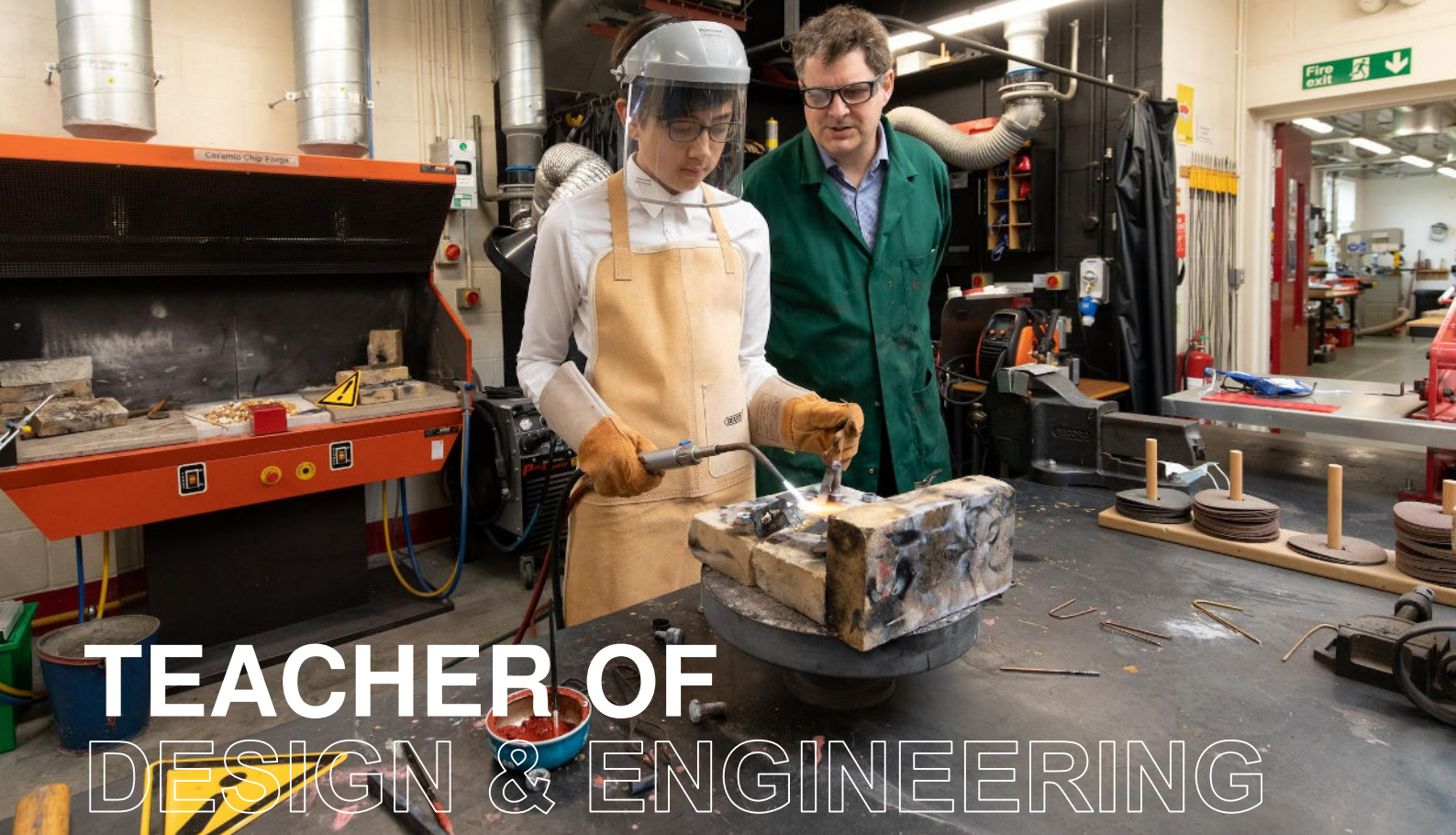
The School's examination results and university entrance record consistently rank among the best achieved anywhere. Nearly all Hampton leavers go on to undergraduate courses at Russell Group or equivalent universities. Around 20 Hamptonians are offered places at Oxford and Cambridge annually and a good number move on to global top-10 universities; we also support pupils who wish to study at US and Canadian universities, some of whom achieve academic and/or sporting scholarships.

Our alumni network is extremely strong and former pupils remain very interested in their School, in no small part due to the exceptionally warm and mutually respectful relationships enjoyed between Hampton staff and their pupils.

Situated on a green field site in a leafy suburb of South West London, we are fortunate to have over 27 acres of playing fields within our spacious

grounds and a generous investment programme ensures that pupils and staff benefit from first-class facilities across all areas of School life. These include a state-of-the-art 3G sports ground, a large Sports Hall and The Hammond Theatre, along with an excellent library and specialist facilities for Art, Music, Science, Technology, IT and Languages and our recently opened Sixth Form Study and Careers Centre. The Millennium Boat House, shared with our neighbouring girls' school, Lady Eleanor Holles, enjoys a prime location on the nearby River Thames and provides the focal point for our renowned Boat Club.

The School was judged to be excellent (the highest possible recognition) across all categories by the Independent Schools Inspectorate (ISI) in May 2023. Inspectors found that Hamptonians' achievements are exceptional across academic and co-curricular areas of School life and concluded that 'outstanding analytical and thinking skills' lead to academic achievements 'far and above national and worldwide averages'. The ISI team also highlighted Hamptonians' excellent personal development and concluded that 'Pupils are open-minded and tolerant and have a clear sense of justice, successfully fulfilling the School's aims for them to make sense of the world, to want to make a difference for good, and to aspire to personal best while supporting those around them with kindness and respect'. A copy of the full ISI report can be found on the School website and a summary booklet of the inspection team's key findings is linked [here](#).



TEACHER OF DESIGN & ENGINEERING

Hampton is one of the country's foremost academically selective independent schools and this is an excellent opportunity to join a vibrant and successful department in a happy, high-achieving setting.

This is an excellent opportunity to join a vibrant and highly successful department in an outstanding school. The Design and Engineering (Technology) Department at Hampton promotes innovation, resourcefulness and independent learning, encouraging each pupil to reach his full potential through individual design and make projects.

The successful candidate would be expected to be passionate about teaching Design and Engineering to pupils across the School including those hoping to study Engineering and other related technical subjects in higher education and beyond.

Hampton's Design and Engineering pupils produce exceptional work, and in recent years, several Hamptonians have won highly prestigious Arkwright Scholarships, designed to nurture future leaders in Engineering and Design.

The successful candidate will be expected to teach up to 30 (40 minute) lessons per week, which would usually also include a form tutor period. A contribution to the wider life of the School is also expected from staff at Hampton and Teachers may be responsible to other colleagues in their work, (e.g. a Form Tutor will have the Head of Year as their immediate line manager for pastoral work). The role would suit either a Newly Qualified Teacher or experienced teacher.



THE DEPARTMENT

The Design and Engineering Department at Hampton School is currently staffed by five full-time members of staff and two technicians. It is extremely well resourced and innovative, with the ability to work in a wide variety of materials to a high level, and a clear focus on the more modern manufacturing processes using CAD/CAM, as well as on programmable electronics.

The subject is taught across three multi-material workshops, and two computer suites, with a wide range of equipment and machinery, making this an extremely well-equipped facility. The CAM facilities include two laser cutters, two CNC routers, a CNC lathe, and six 3D printers. On the programmable components side, the Department has in-house PCB manufacturing facilities, and a range of custom designed boards based around the popular Arduino platform. Hampton's Design and Engineering pupils produce exceptional work, and in recent years, several Hamptonians have won highly prestigious Arkwright Scholarships, designed to nurture future leaders in Engineering and Design.

The aims of the department are to:

- To promote the practical, investigative and creative skills required to understand and contribute to our technological world
- To encourage problem solving, decision making and independence through practical project work and design
- To prepare pupils for higher education in fields such as Engineering, Architecture and Design

Co-Curricular Activities

- Tech Club: Open to boys in the First to Third Year, this very popular club allows pupils to pursue their interest in Design and Engineering and hone their practical skills using our fully equipped workshops or CAD/CAM equipment. Recent projects have included solar powered lamps, pewter casting, e-textiles, and fidget cubes
- Aeronautics Club: Open to boys from First to Third Years, offering the opportunity to build and race quadcopter drones
- Design Ventura: Open to boys in the Third Year where they enter this competition run by the Design Museum



THE CURRICULUM

Lower School

In the First and Second Years, pupils enjoy a highly innovative and varied curriculum designed to expose pupils to tools, processes and equipment commonly found in prototyping workshops. This also includes Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) and coding. All boys are taught Design and Engineering for a double period a week, with mixed ability classes of 10-15 boys, in form groups. Boys are then able to select whether or not to continue the subject in Third Year, and typically around 60% of students elect to do so. In the lower school, boys are introduced to the workshop environment, to working with a variety of materials, machines and processes.

The Third Year course focuses on developing the practical and design skills they will need for the GCSE course. It introduces an extended range of materials and processes, and delivers taught theory in a range of areas, to increase the knowledge base of pupils considering taking the subject forward. It also seeks to build the independence of thought and product development skills needed for success at GCSE and beyond.

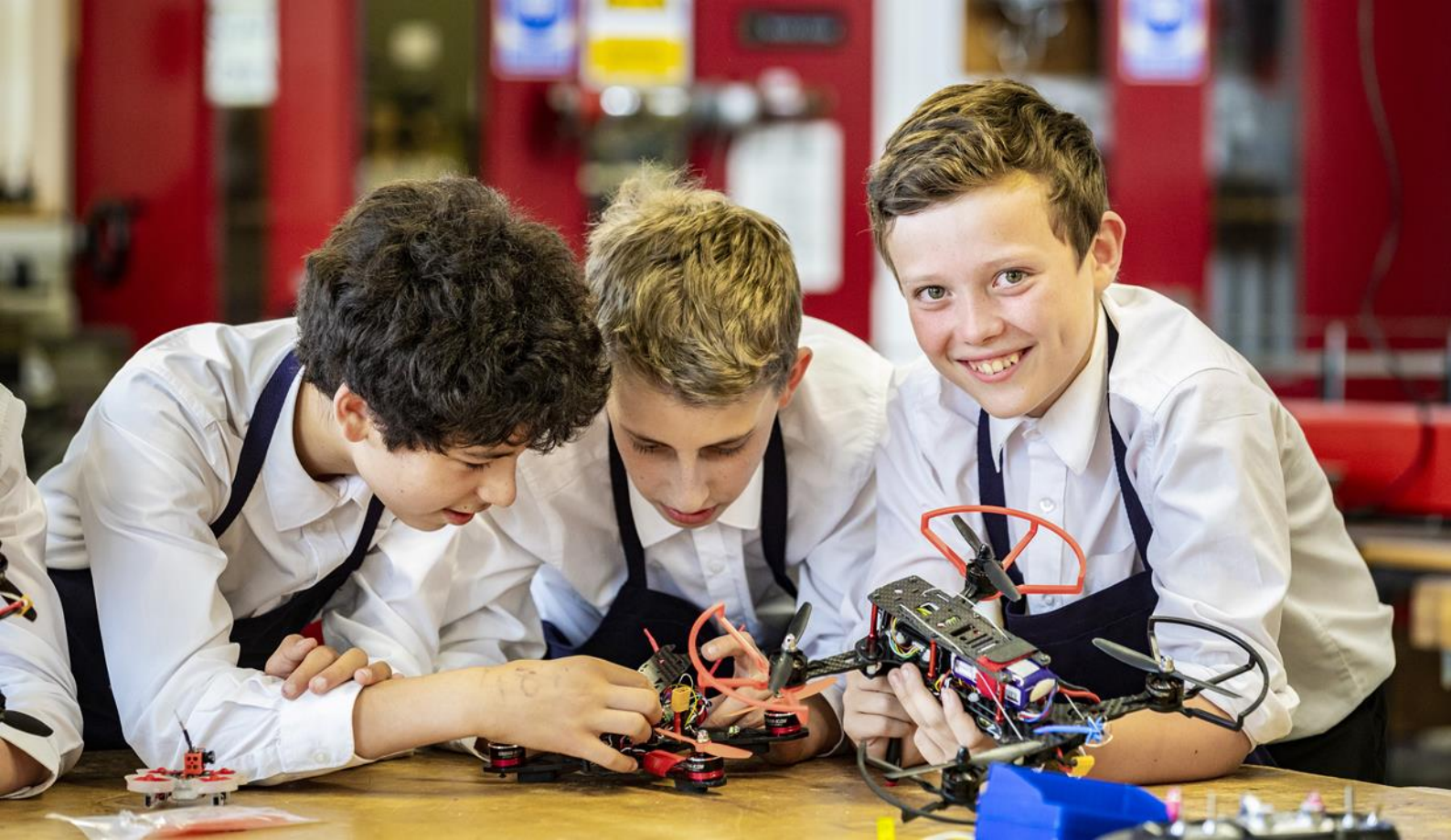
GCSE

We follow the OCR syllabus in Design and Technology. This gives pupils with different interests and skillsets the opportunity to benefit from the Design and Engineering experience, and develop the “soft skills” mentioned above. Typically, anywhere between 30-60 boys choose to study Design and Technology at GCSE each year. Classes are usually no larger than 15 boys, and receive the support of at least one technician as needed during any practical work. We are pleased that over the last couple of years we have built and maintained a 100% A* - B performance in the GCSE despite the challenges of remote learning.

A Level

At A Level, we follow the OCR specification in Design Engineering. This rigorous course allows boys aspiring to higher-level study in Engineering or Design to apply their Mathematics and Physics knowledge to solve real-world problems. It places an emphasis on the technical, whilst still developing the project-based skillset so often lacking in Engineering applicants.

As the school has made the decision to replace AS level with an extended learning experience, the department will be entering the Shell Eco Marathon competition from September 2022 to design and build a racing car for the “battery electric urban concept vehicle” category.



KEY RESPONSIBILITIES

- To teach Design and Engineering throughout the age range (The Design and Engineering full time teaching load is currently 30 x 40 minute periods per week)
- To oversee and organise the resources for each group of pupils you teach and to advise the Head of Design and Engineering on resources required to enable effective teaching
- To develop a continual updating of knowledge and understanding of the Design and Engineering curriculum through personal reading, research and INSET
- To complete all student assessment requirements, including the regular marking of homework and coursework
- To assess, record and track the progress of the students that you teach according to the expectations of the Head of Design and Engineering and School policies
- To deliver teaching of a high standard and to maintain standards of achievement across the department
- To run one lunchtime support Clinic for students who need additional help
- To maintain standards of discipline in line with Hampton School policies
- To participate in whole school and departmental INSET
- To work collaboratively with other colleagues in the school and department
- To contribute to the pastoral aspects of the School as a Form Tutor N.B. a Form Tutor will have the Head of Year as their immediate line manager for pastoral responsibilities.



PERSON SPECIFICATION

The successful candidate will be able to demonstrate the following skills, qualifications and experience.

Essential Criteria:

- A commitment to the safeguarding and wellbeing of pupils
- A good honours degree in Engineering, Design, Computer Science, or other relevant subject
- Enthusiasm for Design and for Engineering, and a desire to promote the opportunities these subjects provide for higher level study
- An interest in the more “cutting edge” aspects of the subject, including CAD/CAM, robotics, and the Internet of Things
- Excellent communications skills - oral, written, graphical, and the use of ICT (All teaching staff will be supplied with a laptop computer)
- The ability to enthuse and inspire boys in this exciting and fast-moving subject
- The ability to demonstrate characteristics of outstanding teaching practice
- A clear understanding of the Health and Safety issues and requirements when teaching in a workshop environment
- An awareness of the demands of teaching bright students and a commitment to fostering high academic achievement in an academically selective school setting
- The ability to work effectively and collaboratively as part of a team and a willingness to contribute to the development of departmental resources and schemes of work
- A cheerful and professional approach which inspires confidence in pupils and parents
- Calmness and efficiency, with the ability to work under pressure at times
- Commitment to the all-round ethos of the School, including its co-curricular activities and pastoral approach
- The ability to demonstrate characteristics of outstanding teaching practice
- Keen eye for detail and administrative competence
- Willingness to contribute to the rich programme of extra-curricular Design and Engineering activities
- Assiduous, and willing to avoid the ‘9 to 4 approach’.
- A professional, collaborative approach that inspires confidence in pupils, parents and colleagues
- Commitment to the all-round ethos of the School, including its co-curricular activities and pastoral approach
- A willingness to organise and lead Technical, Design or Engineering day visits and residential trips.

Desirable Criteria

- DATA Health and Safety Accreditation in a variety of machines and processes
- A teaching qualification and/or some previous teaching experience
- Some experience programming for hardware devices, especially the Arduino platform
- Knowledge of the requirements of the Independent School Inspectorate in terms of teaching, learning and assessment.
- An ability to offer skills in some part of the extra-curricular programme of the School
- Enjoy rising to the challenge inherent in a school environment
- The ability to develop and maintain effective relationships with all members of the school community and outside agencies.



OTHER

- To act as Fire Marshal and First Aider as required. Training will be provided.
- Any other reasonable tasks required by the Headmaster and/or Bursar in association with the above role.

Please note that there may be some changes and additions to the above. This document is designed to provide applicants with a “flavour” of the position and responsibilities and is not necessarily comprehensive, however, the employee may be called on to perform other tasks as directed by the Headmaster or anyone acting on their behalf.

TRAINING

- Where necessary, to undergo on the job training under the general direction of the Head of Department to increase competence, proficiency and safety awareness.
- To attend INSET training outside the school where appropriate to increase competence, proficiency and safety awareness.

SALARY

Hampton has its own generous salary scale and benefits package. Accommodation may also be available.

NQTs/ECT's are provided with an appropriate programme of induction leading to QTS, valid across both sectors.

The Hampton School Trust Governors currently offer the following non-contractual benefits to staff, subject to any terms and conditions and the School's eligibility requirements: private medical insurance (PHC); death-in-service benefit insurance policy; a Medicash healthcare cash plan; enrolment in appropriate Pension Scheme, personal accident insurance, School fee remission, cycle to work scheme, lunch, sports facilities and counselling.

Please note that the above list is not exhaustive and non-contractual benefits are provided at the discretion of the Governors.



EQUAL OPPORTUNITIES

It is the policy of Hampton School to provide equal employment opportunities for all qualified individuals and to prohibit discrimination in employment on any basis protected by applicable law, including but not limited to race, colour, religious creed, marital status, sex, sexual orientation, ancestry, national origin, age, medical condition or disability. Hampton School promotes equal employment opportunities in all aspects of employment through positive employment policies and practices.

If any special requirements or access arrangements are required to attend an interview, please inform the School.

Offers of employment will be made on merit and suitability of qualifications and experience, in pursuit of our policy of equal opportunities.

SAFEGUARDING

The post holder's responsibility for promoting and safeguarding the welfare of children and young persons for whom s/he is responsible, or with whom s/he comes into contact will be to adhere to and ensure compliance with the School's Safeguarding Policy and Procedures at all times. The School reserves the right to offer the post at any stage in the appointment process.

Further details of the School are available on the website.

This post involves working with children, it is an offence to apply for this role if you are barred from engaging in regulated activity relevant to children.

Please note that all appointments are subject to the Hampton School Trust Recruitment, Selection and Disclosure Policy and Procedure.



For an informal discussion about the role and requirements, please contact
Human Resources via [**recruitment@hamptonschool.org.uk**](mailto:recruitment@hamptonschool.org.uk) or
call **020 8979 5526**.

Further details about the post and an application form are
available on the School website's vacancies page.

Hampton School, Hanworth Road, Hampton, Middlesex, TW12 3HD

[**www.hamptonschool.org.uk**](http://www.hamptonschool.org.uk)