

ENGINEERING TECHNOLOGY TECHNICIAN Part-Time, Term-Time only

JOB SPECIFICATION

The Design and Technology Department

Design and Technology is a highly successful and growing department, teaching a range of design and technology disciplines including basic wood/metal work and graphics. Historically the department has specialised in electronics, programmable control and digital manufacture, and these flavours are still very strong in the department and current curriculums. The subject has provided a platform for many pupils over the years to study Design and Engineering at the highest level.

The department is seeking to build the engineering skills, and as such the successful candidate will have a technical and practical background in a range of disciplines. The DT labs combine workshop and ICT activities, the department is not a heavy resistant materials centre and as such does not currently have large workshops and associated machinery. Each DT lab has a small number of fretsaws and pillar drills, the CADCAM suite boasts two laser cutters, four 3D-printers, a CNC milling machine, an engineering lathe and PCB etching facilities. The successful candidate will become skilled in all these machines and work regularly with electronics and programmable control with minimal supervision.

The department consists of 3 full time and 1 part-time teachers, and a number of others who contribute to departmental teaching.

The curriculum is structured in the following way:

Years 7-8: Compulsory courseYear 9: Elective course

Years 10-11: GCSE Design and Technology

• Year 12-13: A Level Design and Technology: Design Engineering

Examples of current class activities in Years 7-9 include: Build of a $\frac{1}{2}$ metre aluminium bridge electronic dice, phone stand and light project. GCSE/A Level projects tend to be highly mechanised with a programmable element. Student projects include: Robot drummer, coloured glass sorter and ping-pong ball launcher.

JOB DESCRIPTION

The School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.

Reporting to

As a member of the support staff, the Design and Technology Technician's ultimate line manager will be the Bursar, although day to day responsibility will be to the Head of Design and Technology.

Job Purpose and Key Responsibilities

Technicians have a vital role to play in the school, both in support of teachers and in having responsibility for various administrative matters. The essential task is to ensure that pupils derive maximum benefit from their lessons (especially practicals) by communicating well with teaching staff to make sure that the correct equipment is provided, and where necessary providing additional support in lessons to staff or students. Other important tasks involve the maintenance of records and equipment. In all of these activities and duties, it is expected that standard safety procedures are followed and that everyone is respectful of equipment and the rooms.

Key responsibilities	Activities that are likely to be carried out	Likely frequency
To coordinate the use of practical resources and facilities and provide	Preparation of resources, assembling equipment.	Daily
assistance and advice in meeting the practical needs of the Design and	Giving technical advice to teachers, technicians and pupils/students.	Daily
Technology curriculum, including liaising with teaching staff and support	Carrying out risk assessments for all practical activities and machinery.	Daily
staff outside the department.	Assisting in practical classes & carrying out demonstrations.	As required
	Responsibility for certain aspects of the induction of new teachers, particularly with reference to Health & Safety policies and use of tools/machinery.	As required
To ensure the maintenance of a healthy & safe working environment through: • actively contributing to the	Keeping up-to-date with health & safety requirements and with developments in practical science. (Attending courses & reading publications.)	As required
assessment, monitoring and review of both health & safety procedures and information resources;	Giving health & safety advice to technical staff, teachers and students.	Daily
keeping up to date with current procedures and practices through	Disposal of waste materials.	As required
continuing professional development; sharing of technical advice and	Carrying out electrical and other safety checks, etc.	As required
support on health & safety issues to teaching and technical staff; the safe treatment & disposal of	Organising, storing and checking the condition of the equipment.	As required
used materials including hazardous substances and responding to actual or potential hazards;	Carrying out all checks required of them by the school.	As required
the healthy & safe storage and accessibility of equipment and materials.		
To contribute to the design, development and maintenance of specialist resources and/or long-term projects.	Constructing & modifying equipment.	As required
Under the overall guidance of the Head of Design and Technology to	Collecting, checking and returning equipment to stores.	Daily
ensure that both routine and non- routine checking, cleaning,	General classroom cleaning of bench surfaces and fixed equipment.	Weekly
maintenance, calibration, testing and	General cleaning and repair of equipment.	Monthly

repairing of equipment are carried out to the required standard.		
To contribute to the design and upkeep of displays in the department	Constructing models, generating posters.	As required
To support departmental teaching staff in the management of equipment usage by students	Operate equipment (i.e. laser cutter) with cutting lists to produce products for projects for all years. Liaise with students with requests for equipment usage non-technology.	As required As required
To support departmental teaching staff during lessons when students require additional resource	Occasional one to one help with a student – practical work only.	As required
To support the department in the promotion and running of lunchtime technology clubs and societies	Working with students and staff in the weekly offering of technology-related lunchtime clubs.	1-2 lunchtimes /week

PERSON SPECIFICATION

Skills and Experience Essential

- A good general standard of education.
- High-level practical experience using and servicing workshop machinery (fretsaws, pillar drills, table saws, lathe, etc).
- Practical skills in 'DIY', including basic woodwork and metal work.
- Experience using CADCAM equipment.
- Understanding of electronics/electrical circuits and use of lab equipment.
- ICT competence.
- Proven communication, organisational and interpersonal skills.
- Effective self-management to meet commitments and deadlines.
- Ability to work collaboratively and supportively with colleagues within school and in other organisations.
- Demonstrates respect and values the different experiences, ideas and backgrounds others can bring to work and to teams.
- Commitment to continual personal and professional development.
- Understanding of appropriate conduct in relation to working with, and the protection of, children and young people.
- A healthy sense of humour and can-do attitude.

Desirable

- A basic knowledge of First Aid.
- A full, clean driving licence.

OUTLINE TERMS AND CONDITIONS

Working Hours

This post is part-time (27.5 hours a week), term-time only (35 weeks a year). Term time comprises the published term dates plus two additional days at the beginning of the Michaelmas term and one additional day at the beginning of the Lent term.

The working hours are 10.00 am to 4.00 pm, Monday to Friday, including a half hour, unpaid, break for lunch each day. There is scope for some variation in the working hours, which the successful candidate may agree with the Head of Department; however working on every weekday is required.

Occasional additional hours may be required, but these will be agreed in advance with the Head of Design and Technology, and will be paid.

Holidays

Paid holiday entitlement is six weeks including bank holidays per annum which must be taken during School holidays.

Salary

The starting salary will normally be in the range of scale point T2 - T4 of the Perse School's Technician salary scale. For the part-time hours and term time weeks (41 weeks paid per year including holiday), this will be £12,794 to £13,836 per annum (which is pro-rated from the full year salary of £22,128 - £23,930 per annum) at 2019/20 rates (due to increase from September 2020).

The actual starting salary will depend upon the relevant skills and experience of the successful candidate, with progression through the Technician salary scale subject to performance.

KW/HR, May 2019