

# Candidate Information Pack

**STEM Technician** 









### **Dear Candidate**

Thank you for expressing an interest in the role of Teacher of Design Technology and Engineering – KS4 and KS5 at UTC Heathrow.

UTC Heathrow is a University Technical College (UTC) specialising in Engineering Science & maths, which opened in September 2014 in a 'state-of-the-art' building. The specialist curriculum appeals to secondary school-aged students keen on developing their talent in these areas. A UTC is different from the average school because it is designed with the backing of the local business community and has industry partners involved. UTC Heathrow connects students with industry partners Heathrow, Cisco, Peter Brett Associates, Fujitsu and TfL, offering great access to employment and sponsorship opportunities.

We have created an inspirational learning environment where learning is central, UTC Heathrow offers a unique learning opportunity for young people interested in engineering & STEM, by developing the technical, personal and employability skills needed to progress to university and the world of work.

Our aspiration is for UTC Heathrow to become the leading UK Centre specialising in the broad spectrum of engineering. It will lead the way in establishing engineering as a mainstream school subject with a variety of progression routes into employment and higher-level study.

We have high aspirations and want every student to leave us ready to take their place in the global engineering sectors. A relentless focus on excellence and a leading-edge approach will make that happen.

We recruit a balanced intake of students across the ability range in each year of entry. We currently have 245 students on roll across Years 10-13 and when at capacity will have a total of 500 students; it is anticipated we will reach capacity in 2023.

The information in this pack has been designed to give as much detail as possible to allow you to decide if UTC Heathrow is the right career move for you. Please do feel free to contact the Principal, Wayne Edwards on wayne.edwards@heathrow-utc.org, telephone 01923 602130 if you would like to make an appointment to discuss the role in further detail.

Yours faithfully

Wayne Edwards

**Executive Principal** 





# Stem Technician

Dates: January 2023

Salary: ALET Support Staff: Scale 4-9 (24,100 – 26,167) Pro Rata

Location: UTC Heathrow, Potter Street. Northwood. Middlesex. HA6 1QG

**Contract type:** 37 hours per week -Term-Time only

Contract term: Permanent

We are looking to appoint an enthusiastic STEM Technician who is able to support both Science and Engineering. The right candidate will understand the operation of a Science department and be able to Prepare resources for delivery at GCSE and A Level in line with CLEAPSS and other Health and Safety requirements. The candidate would also be able to support the Engineering department and support them in preparing resources for practical engineering. Being able to maintain engineering would be advantageous but not essential as training will be given as part of CPD.

The UTC works with employers and runs the very first Digital Futures Program in the country that supports engineers and the Digital Futures industry. The engineering department has state of the art equipment and is well resourced. The UTC has 4 Science rooms and a Preparation room. Science is at the hear of the UTC and the teachers support and deliver lessons within engineering.

All students at UTC Heathrow specialise in either Engineering or Digital subjects; at 14 they will also study a broad and balanced curriculum and at Post 16 the curriculum becomes more specialist with A levels in Physics, Design Technology, Mathematics and Computer Science. In addition, students can study a specialist BTEC Level 3 course in Engineering or IT/Computing and. At capacity, we will be educating 500 students who will all have a passion for Engineering or Digital; it is a truly inspirational environment.

UTC Heathrow is part of Activate Learning Education Trust which is made up of three other UTC's – Reading, Oxfordshire and Swindon and two secondary schools – The Bicester School and Theale Green School.

This role will provide you with:

Access to state of the art facilities





- Industry employers to support CPD
- Professional qualifications
- passionate students
- opportunities for career development as the UTC grows and across Activate Learning Education Trust
- An opportunity to be at the forefront of STEM education

If you believe that this is an environment where you can thrive, develop and substantially contribute to an exciting future for UTC Heathrow, then you are encouraged to explore further by contacting the Nicola Griffiths, <a href="https://example.com/hR@heathrow-utc.org">HR@heathrow-utc.org</a> for more information, if required.

Completed application forms with an enclosed supporting letter should be emailed no later than midday on Monday 5<sup>th</sup> December 2022 to HR@Heathrow-UTC.org

# Interviews will take place after the closing date

We are an equal opportunities employer and are committed to the safeguarding and promoting the welfare of children. The successful candidate will be subject to an enhanced DBS check.

We undertake social media checks on all shortlisted candidates in accordance with DFE statutory guidance 'Keeping Children Safe in Education 2022'

The UTC will endeavor to make any necessary reasonable adjustments to the job and the working environment to enable access to employment opportunities for disabled job applicants or continued employment for any employees who develop a disabling condition.

UTC Heathrow, Potter Street Northwood Middlesex HA6 1QG





# **JD STEM Technician**

# **Main Duties and Responsibilities**

The following key tasks and responsibilities summarise the main aspects of the job. They will be reviewed periodically and amended by agreement to ensure the effective operation of the UTC and to foster development of the individual.

- Ensure the efficient running of the Engineering, Science and technical services in the Engineering and Science Department, including lesson preparation, storage, maintenance, repair, stocktaking and the cleaning of equipment.
- Maintain the supply of class equipment, the return to store after use and repair, when required.
- Prepare Science experiments for the Science department in line with examination boards criteria and CLEAPSS.
- Advise teaching staff in technical and safety matters; to work closely with newly qualified teachers to ensure that they are familiar with relevant equipment and materials.
- Provide administrative support to teaching staff, including duplicating, resource production and H&S.
- Be familiar with the latest safety regulations and changes in Science and Engineering and engage in CPD.

The Engineering and Science Department offer GCSEs and L3 qualifications in the following subjects:

GCSE Trilogy Science,

GCSE Biology,

GSCE Chemistry / A Level Chemistry

GCSE Physics/ A Level Physics

GCSE Design Technology/ A Level Design Technology

L2 EAL Engineering Certificate

L3 BTEC Engineering

The Engineering Department consists of a dedicated Engineering floor the Science Department have four dedicated classrooms. The Engineering and Science teams are a diverse and friendly community that prides itself in strong practical work, an excellent safety record and an ongoing commitment to the promotion of STEM education

The UTC is committed to safeguarding and promoting the welfare of children and young people and expect all staff and volunteers to share this commitment

This job description is current at the date shown, but in consultation with you, may be changed by the Principal to reflect or anticipate changes in the job commensurate with the grade and job title





### **Our vision**

Is 'transforming lives through learning'. Through close collaboration with our academic and industry partners, leading organisations in the engineering and digital sectors, the UTC offers a unique learning opportunity for young people with a strong interest in engineering and digital industries.

Having made a positive choice to join the UTC, students will be well motivated to work hard and benefit from the UTC's innovative and inspirational learning experience. UTC Heathrow's 'graduates' will gain the reputation for demonstrating the skills, attitudes, knowledge and experience sought by the world's leading employers. Through the ongoing links with industry partners, they will be personally known to local organisations such as Morgan Sindall, Peter Brett Associates - Stantec, Heathrow, Fujitsu and TfL, giving them greatly increased opportunities of sponsorship or employment.

# **Activate Learning Education Trust**

UTC Heathrow is part of the Activate Learning Education Trust (ALET), which is a Multi Academy Trust (MAT) established by Activate Learning.

ALET's mission is "to transform lives through learning", bringing to life core values of empowerment, enterprise, connectedness and transformation. ALET work hard to ignite confidence, expand opportunities, energise the community and generate prosperity.

These values are further supported by the learning philosophy, rooted in the dynamics between the brain, motivation and our emotions. Together they shape the learning experience of thousands of students across our group, fostering a culture of high aspirations.

ALET has developed a model for a high-quality learner experience, which:

- Supports student progress, attainment and preparation for progression
- Focuses on secondary education, aligned to regional business needs
- Operates a delegated model of school governance and leadership, striking the right balance between autonomy and sharing.

Activate Learning lead further education colleges and five schools in the region, offering a broad spectrum of vocational courses including Key Stage 4 vocational options, Post 16 vocational and academic courses as well as higher education courses. Developing skills for employability and enterprise is at the heart of the colleges' mission.





# **Industry and academic partners**

# Our academic partners are:

Brunel University

The key industry partners are:

- Heathrow
- Morgan Sindall
- Adkins Global
- Fujitsu
- Stantec

Industry partners are involved in several ways:

- consultancy, advice and guidance on curriculum development
- product and services donations
- · employer accreditations
- employer-led projects and challenges
- · coaching and mentoring
- work experience.
- Participation in the governance of the UTC.

Industry partners enable students to study specialisms and gain globally accepted industry standard accreditations.

# Location and facilities

The UTC provides advanced, best of breed facilities for engineering and digital, giving our students an environment that will feel more like a global company than a school, further preparing them for employment.





### Curriculum

The focused curriculum prepares students for a career in engineering sectors while keeping other career routes open. It develops well-rounded and well-educated leaders, professionals and entrepreneurs for the future.

Students are encouraged to take GCSEs and A levels alongside technical qualifications and gain industry standard employer certifications and professional society memberships. They will be able to make the most of their talents and move on successfully to higher education, further education, apprenticeships and employment.

## **Environment**

Students at the UTC learn in an environment more like a workplace than a traditional school. The working day is longer than students usually experience, with on-site learning starting at 8.30am and ending at 3:30pm each day. Equipment and facilities in the UTC will be industry standard as specified by our industry partners.

# Learning experience

The learning experience blends different forms of learning. It develops a very broad reach of knowledge and strong practical and social skills. Students are coached by tutors and mentored by industry and academic partner's sessions.

## The Key Stage 4 programme

All students study GCSE's in English Language, English Literature, Mathematics, Science (Biology, Chemistry and Physics), EAL Engineering and IT. They also have a choice of studying GCSE Design Technology or Computer Science.

# The Key Stage 5 programme

Students are able to join the UTC at 16 or progress to this stage from Key Stage 4. A Level subjects will include in Mathematics, Physics and Computer Science. In addition, students can study technical qualifications in Computing/IT or Engineering through the BTEC qualifications in engineering and IT. There is also an opportunity to take globally recognised employer accreditations from Microsoft and Autodesk through professional qualifications.

Specialisms started at Key Stage 4 can be developed into employer accreditations (e.g. Microsoft and Cisco) and, when combined with work experience, enable students to apply for membership of professional associations. The embedded learning and enrichment activities at this stage are specifically targeted towards developing the skills and attitudes that make students employable.

Students in the 6<sup>th</sup> form can study in one of the following Routes

**Route 1** 3 A level subjects

**Route 2** 2 A Level Subjects + BTEC Extended Certificate in IT or Engineering

**Route 3** 1 A Level Subject + BTEC Diploma in IT or Engineering

Route 4 BTEC Extended Diploma in Engineering or IT





### **Terms and Conditions of Employment**

### **Proposed start date**

Please see advertisement

### Salary

Please see advertisement

### **Pension**

**Teachers Pension Scheme** 

### **Holidays**

You will be entitled to receive your normal remuneration for all Bank and Public Holidays normally observed in England and Wales and national school holidays in each year (being the period from 1st September to 31st August).

### **Working hours**

The post holder will be required to work as many hours as are reasonably necessary to fulfil the requirements of the role. Our core working hours are 8:15 – 16:30 Monday to Friday.

### Place of work

The principle place of work will be Potter Street, Northwood, Middlesex, HA6 1QG. As part of your duties, you may be required to travel within the United Kingdom or further afield. Such travel may include attendance at conferences or seminars or meetings.

### **Travel to work**

As part of your Contract of Employment you should live within reasonable travelling time/distance of the UTC to fulfil the requirements of the role.

### **Health check**

Confirmation of appointment to the post will be contingent on a satisfactory health check.

### References

Confirmation of appointment is also subject to satisfactory references.

# **Background**

In accordance with the criteria defined in and the provisions of the joint Home Office/

Department of Education and Science circular Protection of Children; 'Disclosure of Criminal background of those with access to children' dated 17th July 1986; the appointment is subject to a check by Criminal Records Bureau in respect of any possible criminal convictions.

The Employee warrants as follows:

- 1) The post holder will disclose to the Employer any previous criminal convictions that he/she may have and which are not spent within the meaning of section 1 of the Rehabilitation of Offender's Act 1974 (Exceptions) Order 1975 9for example, where the Employee is involved in the teaching, supervising or training of persons under the age of 18.
- 2) That the post holder will disclose to the Board of Governors immediately upon conviction, the fact that he/she had been convicted of any offence during the period of his/her employment.

AND in the event that the Employee fails to disclose any convictions in accordance with paragraphs 1 and 2 above, such failure to disclose may be deemed by the Board of Governors to be gross misconduct.

# **The Application Process**

Please see the advertisement

