

IT Specialist

Department of Computer Science and Technology

Closing date: 20 July 2025

Job Reference: NR42821



IT Specialist

Salary:

£41,671 - £55,755

Contract:

Permanent

Location:

West Cambridge

Faculty / Department:Computer Science and
Technology**Responsible to:**IT Infrastructure
Specialist**Working Pattern:** Full

Time

The Department of Computer Science and Technology (often informally known as the Computer Laboratory) is a growing research-intensive academic department within the University of Cambridge that encompasses Computer Science, along with many aspects of technology, engineering and mathematics.

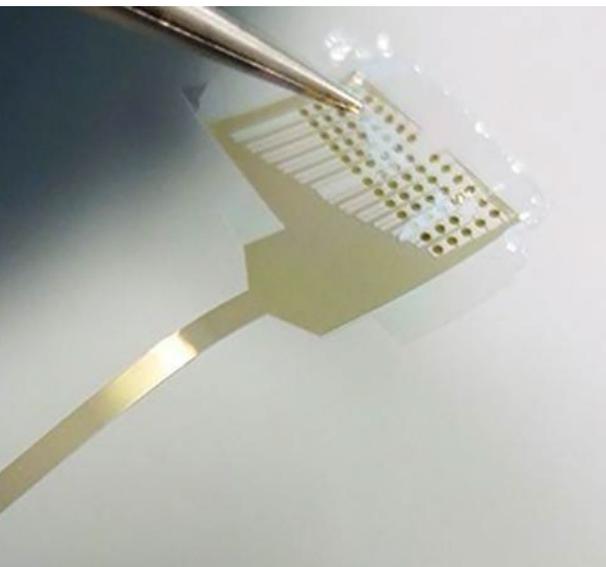
Our established and experienced IT team supports the highly varied and novel research activities of the department, working with world-leading computer science researchers in computer architecture, systems, cybersecurity, machine learning and many other topics, each with interesting and challenging requirements. The IT team also supports the department's teaching and business functions alongside the University's central Information Services.

Purpose of the role

We are seeking a specialist Linux system administrator to join the IT Infrastructure team. You will take responsibility for management of a diverse fleet of Linux/Unix servers, virtual machines and desktops, and work with the rest of the team to maintain our network infrastructure, in-house data centre, VM clusters, storage systems and GPU clusters. You will have exciting opportunities to design, implement and operate new systems and services as well as to modernise or replace existing systems.

This role will suit someone who has an eagerness and ability to learn as well as keeping their knowledge up to date. You will also enjoy both working alone, to plan and take responsibility for your own projects, as well as working as part of a team.

A significant background in system administration and management of diverse fleets of Linux systems at scale (servers, VMs, desktops and laptops) is essential for this role. It is also essential that you are able to communicate effectively with end users to understand their needs, helping them to select the appropriate systems, including working alongside researchers to adapt or build novel components or systems. You will have experience of writing and modifying scripts and web applications to support your work and ideally will have experience of Python.



Key responsibilities

- **Technical specialism**

Maintain skills and knowledge of relevant specialisms, in particular Linux system administration and related areas, and to provide detailed advice regarding their application as well as undertaking specialised tasks yourself.

An eagerness and ability to learn as well as to keep your knowledge up to date is more important than knowledge of specific technologies and systems.

- **IT Infrastructure**

Provide technical expertise to specify, plan, procure, build, maintain, manage and decommission IT infrastructure hardware, software and configuration in accordance with operational procedures, including servers (both physical and in virtualised computing environments), virtual machine hosts, storage systems, networks and other datacentre appliances.

Use management tools to determine system and network load and performance statistics; implement agreed network changes and maintenance routines.

Identify operational problems and contribute to their resolution, and provide reports and proposals for improvement, to specialists, users and managers.

- **Project management**

Define, document and carry out projects or sub-projects, alone or as part of a small team, actively participating in all phases.

Identify, assess and manage risks to the success of the project, agree project approach with stakeholders, and prepare realistic plans (including quality, risk and communications plans); then track activities against the project schedule, managing stakeholder involvement as appropriate.

Throughout the project, monitor costs, timescales and resources used, and take action where these deviate from agreed tolerances. Ensure that your projects are, where appropriate, reviewed after closure and that lessons learned are recorded.

- **Systems design**

Specify and design large or complex systems, including selection of appropriate design standards, methods and tools, consistent with agreed solution architectures and ensure they are applied effectively, ensuring that the system design balances functional, service quality, security and systems management requirements.

Review others' systems designs to ensure selection of appropriate technology, efficient use of resources, and integration of multiple systems and technology. Contribute to policy for selection of architecture components, evaluate and undertake impact analysis on major design options and assess and manage associated risks.

- **Programming/software development**

Write code to enable you and others to administer systems at scale, ranging from basic utility scripts to more complex bespoke applications. Contribute to and follow local or team-based standards for programming tools and techniques, including security guidelines, and the selection of appropriate development methods. Advise on application of appropriate standards and ensure compliance.

When undertaking a software development project, take technical responsibility for all stages and/or iterations, providing method specific technical advice and guidance to project stakeholders.

Ideally you would have existing experience of Python and bash scripting, and of writing and maintaining small web applications.

- **Database design and administration**

Some of your projects are likely to involve storage of structured data. For these projects, you will maintain and apply up to date knowledge of database concepts, design principles and appropriate database architectures and available software.

You will be expected to analyse data requirements, to establish, modify or maintain a data model and schema appropriate to the required system's specialist requirements, and to demonstrate, install and configure/reconfigure relevant database software.

- **Application support**

Act as a point of escalation for the support team both regarding systems that you are directly responsible for, as well as other specialist Linux or infrastructure queries.

You are therefore expected to maintain support processes, communicate professionally and effectively with end users and colleagues, and check that all requests for support are dealt with according to agreed procedures.

- **Network support**

Contribute towards maintaining network support processes. Where necessary, use network management software and tools to investigate and diagnose network problems, collect performance statistics and create reports, working with users, other staff and suppliers as appropriate.

- **Problem and incident management**

Proactively look for, and implement systems to automatically monitor for, problems in systems, processes and services. When a problem occurs or is reported, you will initiate and monitor actions to investigate the problem, triage its severity and possible security implications, determine possible fixes/remedies and to resolve the problem where possible, sometimes on your own. Escalate unresolved incidents, proactively seeking help from colleagues where needed, and document and communicate incident updates both internally and to end users.

You will also assist with the implementation of preventative measures.

- **Supporting University IT Community**

Actively contribute to the University IT Community to share knowledge, best practice and technical expertise, and where appropriate to adopt consistent or shared solutions to shared problems.

Person Specification

Criteria	Essential	Desirable
Education & qualifications		
Degree level qualification/Level 7 vocational qualification or comparable education, or equivalent experience	✓	
Specialist knowledge & skills		
Demonstrable experience of IT	✓	
Managing technical activities and associated teams with evidence of managing for quality results	✓	
Evidence of working at a tactical or operational level to deliver a technology change	✓	
Evidence of developing and applying an understanding of a new technology to deliver business results	✓	
Evidence of effectively sharing technical knowledge and skill to support the outputs and learning of colleagues and users	✓	
Strong planning skills	✓	
Ability to develop and maintain your own knowledge in your field	✓	
Strong ability to build relationships at all levels of the organisation	✓	
Able to communicate effectively orally and in writing	✓	
Highly proactive, persuasive and enthusiastic	✓	
Experience		
Expert knowledge of one or more IT domains: <ul style="list-style-type: none"> e.g. in IT Infrastructure: expertise in networks or desktop or servers e.g. in application design: expertise in application development, or analysis and design (functional and technical) 	✓	
Expertise in the following technologies: <ul style="list-style-type: none"> Linux Scripting/programming languages such as Python Local and networked storage such as ZFS and NFS Server virtualisation IP and Ethernet networking 	✓	

Computer Science and Technology



The Department of Computer Science and Technology is an academic department that encompasses computer science along with many aspects of engineering, technology and mathematics. We have a world-wide reputation for academic research with consistent top research ratings. Professor Alastair Beresford is the Head of Department.

The Department has around 340 people engaged in research: academic staff, research associates, and PhD students.

The Department carries out research across the computer science field and encourages the development of new technologies and applications. You can read more about research in the [Environment Statement](#) submitted to the most recent REF (Research Excellence Framework) – the system for assessing the quality of research in UK higher education institutions. All aspects of our research environment were rated 'world-leading'.

The Department has an open and collaborative culture, supporting revolutionary fundamental computer science research, strong cross-cutting collaborations internally and externally, and ideas which transform computing outside the University. Please follow the links to the Themes at: <https://www.cst.cam.ac.uk/research> to find out more about our research.

Support staff play a key role in supporting the Department's academic and research endeavours. The Department provides a stimulating environment that promotes a strong sense of community, whilst valuing and recognising individual contributions.

The School of Technology

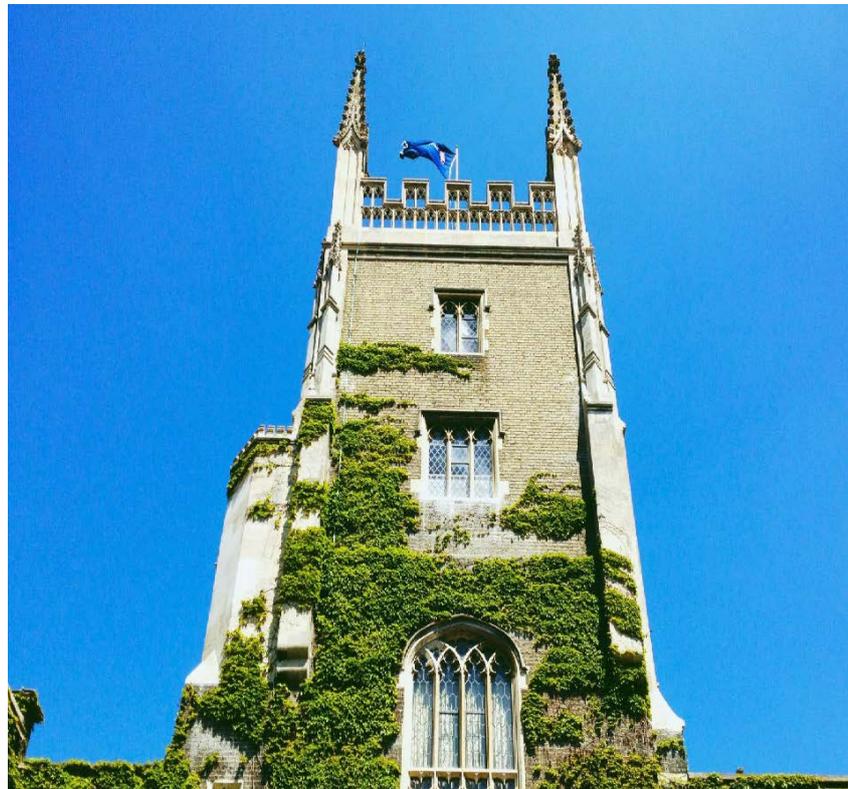
The School of Technology is one of six academic divisions at the University of Cambridge. The School brings together departments and institutes working at the forefront of technological and societal progress, including the Department of Engineering, Department of Chemical Engineering and Biotechnology, Cambridge Institute for Sustainability Leadership, Cambridge Judge Business School, and the Department of Computer Science and Technology.

Dedicated to benefitting society through advancing the frontiers of technology and the economies and enterprises into which it is deployed, we deliver outstanding education, conduct world-class research, and foster discovery and innovation. We support students, staff, industry, and society by nurturing talent, promoting individual enterprise, and building partnerships that benefit society.

We strive to continue to be a global leader in education, research, and innovation, inspiring a diverse community of staff,

students, alumni, and external partners that drives technological progress and societal impact. Building on the fundamental underpinning technologies that we work on, we envision a future where our commitment to excellence and collaboration empowers individuals and industries to meet complex challenges and shape a better world.

Our four strategic research themes – **Sustainable Future, Health and Wellbeing, Increased Competitiveness, and Security and Resilience** – guide interdisciplinary collaboration and reflect our ambition to address some of the most pressing global challenges through technological innovation. We are proud to foster a welcoming, inclusive, and supportive environment where people from all backgrounds can thrive.



We value diversity and promote equal opportunities, recognising that a wide range of experiences and perspectives strengthens our community and our work. International staff are a vital part of our success, and we aim to support all new colleagues in their transition to life and work in Cambridge. Our staff benefit from access to outstanding resources, a vibrant global academic community, and a wide range of personal and professional development opportunities.

The School plays a key strategic role in supporting its departments, allocating resources, shaping academic and financial planning, and advancing initiatives in research, infrastructure, education, and engagement. The School Office, led by the Head and Secretary of the School, supports governance, coordination, and services across departments.

For more information about the School and its departments, please visit:

<https://www.tech.cam.ac.uk/>

Terms of Appointment

Tenure and probation

The appointment will be made on a permanent basis.

Appointments will be subject to satisfactory completion of a 9-month probationary period.

Hours of Work and Working Pattern

This is a full-time appointment.

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefit and defined contribution pension scheme. For further information please visit:

www.pensions.admin.cam.ac.uk/

Annual leave

Full time employees are entitled to annual paid leave of 41 days inclusive of public holidays. For employees working part-time, the annual leave will be pro-rated.

General information Pre-employment checks

Right to work in the UK

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it.

Health declaration Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

Qualifications

The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

References - offers of appointment will be subject to the receipt of satisfactory references.

Information if you have a disability

The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment.

Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact our HR Team at Personnel-admin@cst.cam.ac.uk.

The University

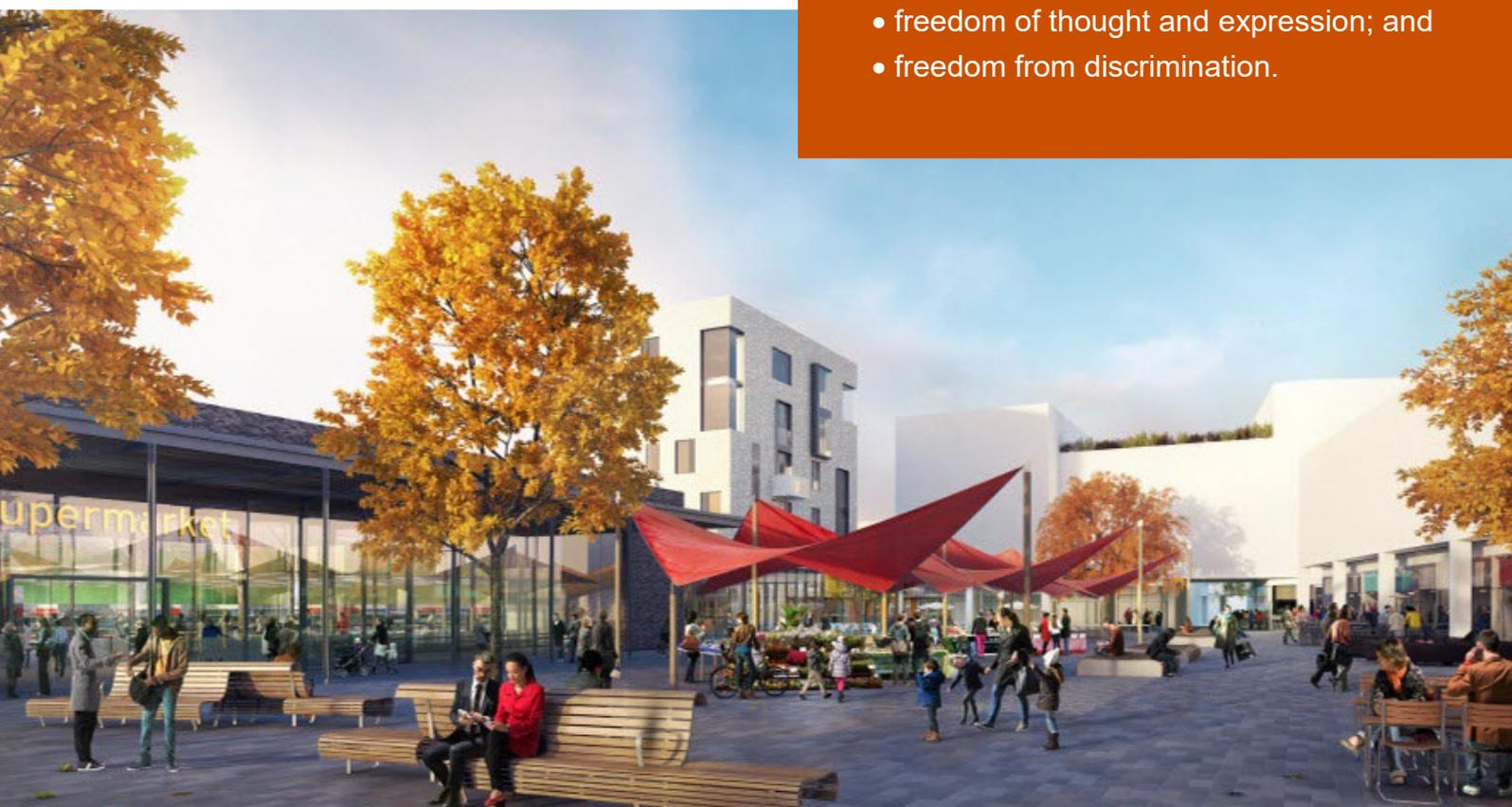
The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more Nobel Prizes than any other University.

Our sustained pursuit of academic excellence is built on a long history of first-class teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

Our mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. Our core values are:

- freedom of thought and expression; and
- freedom from discrimination.



About Us

The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections.

The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit undergraduate students, provide student accommodation and pastoral support and deliver small group teaching for undergraduates.

The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

“Through its outstanding education, research and innovation, the University of Cambridge has made – and continues to make – a lasting contribution to human knowledge and is flourishing. By working at the University of Cambridge, you will be joining a vibrant community of students, scholars and professional services staff committed to supporting and enhancing the University's mission to contribute to society.”

Prof Deborah Prentice, Vice-Chancellor
2023



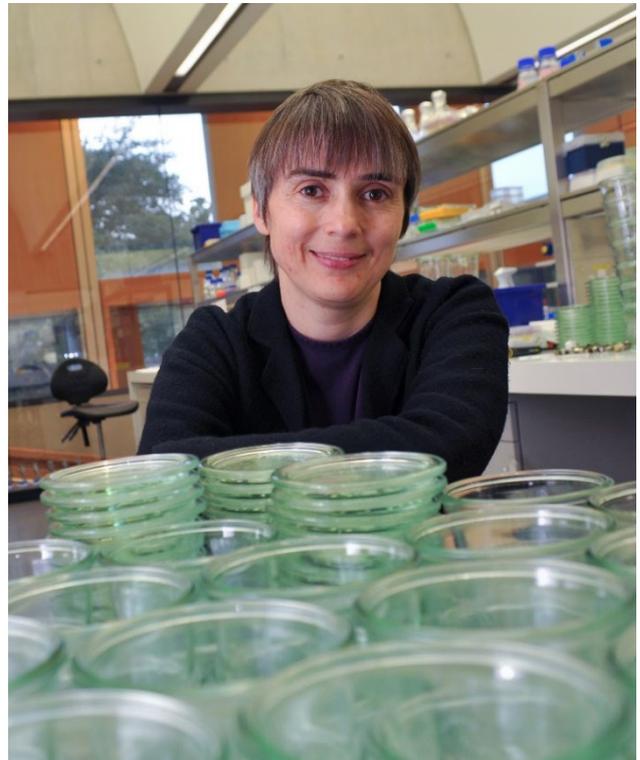
Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 18,000 students and over 16,000 staff from all walks of life and corners of the world.

The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a new science and technology campus to the west of the city centre, and is now expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.



Equality & diversity

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: <http://www.equality.admin.cam.ac.uk/>

The University has a bronze Race Equality Charter aware, with framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's Athena SWAN award recognises and celebrates good practice in recruiting, retaining and promoting women.

Living in Cambridge

Cambridge is rich in cultural diversity. From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances At the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the Visit Cambridge website.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes.

Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

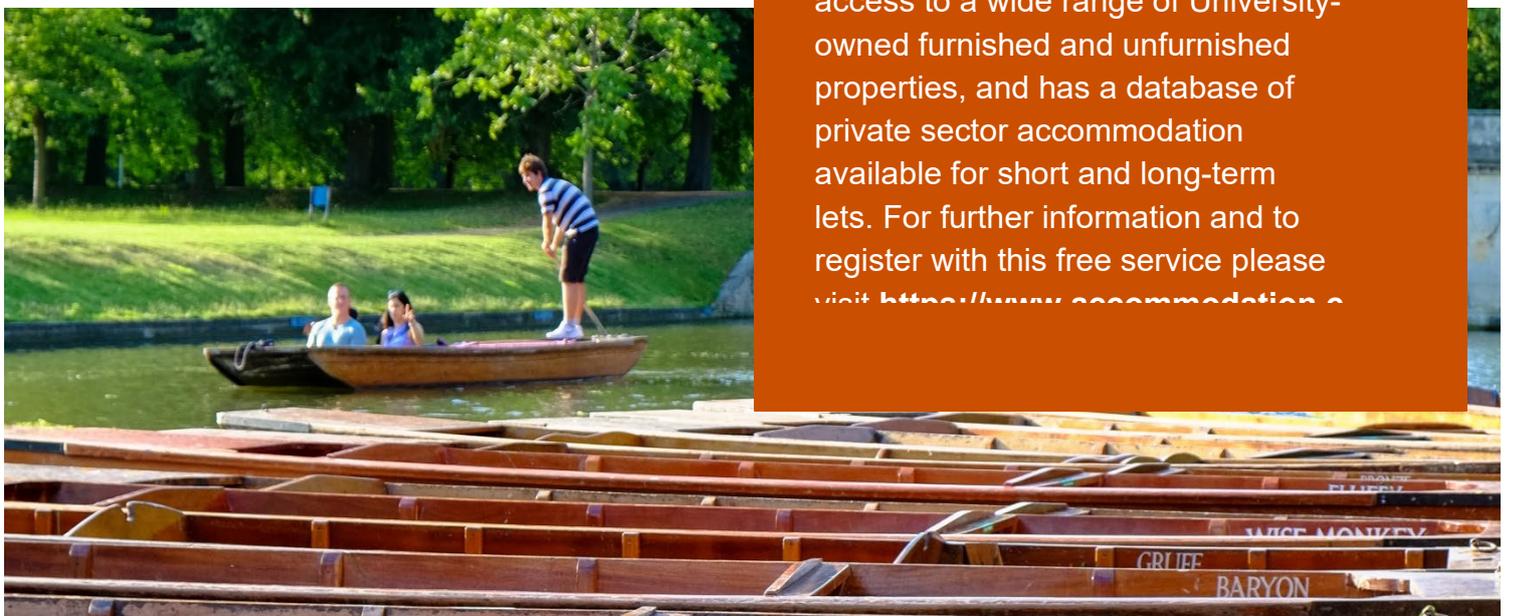
Relocation Support

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. If you would like further information, please visit

<https://www.accommodation.cam.ac.uk/>

Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit <https://www.accommodation.cam.ac.uk/>



What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a [career break scheme](#) for academic and academic-related staff, with additional flexible working policies for all other staff.

Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings.



CAMBens employee benefits

The University offers employees a wide range of competitive benefits, known as CAMBens. CAMBens offers something for everyone across a range of categories, including:

- Financial Benefits, including shopping discounts (both local and national) and a Payroll Giving scheme;
- Relocation and Accommodation Benefits, including relocation assistance and interest-free Rental Deposit Loans;
- Travel Benefits, including Cycle to Work, discounts on train season tickets and interest-free Travel to Work loans;
- Family Friendly and Lifestyle Benefits, including support with childcare and family friendly policies;
- Health and Wellbeing Benefits, including a University Staff Counselling Service, discounts at the University Sports Centre, and other local gyms, and healthcare schemes.



What Cambridge can offer

Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks full pay and emergency family care support via My Family Care.

Other family-friendly support includes:

Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high quality holiday Playscheme may be available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here:

<https://www.childcare.admin.cam.ac.uk/>

The Newcomers and Visiting Scholars Group is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <https://www.opda.cam.ac.uk/>

Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose. The University also hosts the [Cambridge Science Festival](#) and [Cambridge Festival of Ideas](#), as well as [Open Cambridge](#) weekend, which together attract over 50,000 visitors per year. The festivals are a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

Development opportunities

We support new employees to settle in through various activities. The encouragement of career development for all staff is one of the University's values and we put this into practice through various services and initiatives. Our Personal and Professional Development Department provides development opportunities and courses for all University employees. These include face-to-face sessions, online learning modules and webinars. Employees may also apply for financial support to undertake training that will lead to a qualification. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. The CareerStart@Cam programme also supports employees in assistant staff roles who do not hold higher education qualifications to develop their skills, experience and qualifications.



How to apply

Applications should be submitted online via the University of Cambridge jobs page www.jobs.cam.ac.uk by clicking “Apply online” in the job advert. You will need an email address to register for our online system.

Conversations about flexible working are encouraged at the University of Cambridge. Please feel free to discuss flexibility prior to applying (using the contact information below) or at interview if your application is successful.

Informal enquiries are welcomed, please contact: HR Team at personnel-admin@cst.cam.ac.uk .

The closing date for applications is 20 July 2025