

Lead Senior Security Engineer

University Information Services

Closing Date: 10th December 2024
Job Reference: VC43356



Lead Senior Security Engineer

Salary:

£62,098—£65,814

Contract:

Permanent

Location:

Cambridge

Department:

Information Services

Responsible to:

Security Operations
Manager

Working pattern:

Full-time

Purpose of the role

The role holder provides cyber security services to all University institutions and the UIS. By delivering these services, they protect the University's reputation, staff, students, data and IT services from cyber security threats and attacks.

Key responsibilities

Security operations:

Develops policies, standards, processes, guidelines for ensuring the physical and electronic security of automated systems. Ensures that the policy and standards for security operations are fit for purpose, current and are correctly implemented. Reviews new business proposals and provides specialist advice on security issues and implications.

Systems Design:

Develops and drives adoption of and adherence to organisational policies, standards, guidelines, and methods for system design. Champions the importance and value of system design principles and the selection of appropriate systems design life cycle models. Leads system design activities for strategic, large and complex systems development programmes.

Develops effective implementation strategies consistent with specified requirements, architectures and constraints of performance and feasibility. Develops system design requiring the introduction of new technologies or new uses for existing technologies.

Consultancy:

Manages the provision of consultancy services and/or a team of consultants. In own areas of expertise, provides advice and guidance to consultants and/or the client when delivering consultancy services. Engages with clients and maintains client relationships. Establishes consultancy agreements/ contracts and manages completion and disengagement.

Technology Service Management:

Identifies and manages resources needed for budgeting, estimating, planning, developing and delivering a specified portfolio of technology services and systems. Engages with and influences stakeholders to ensure that services are developed and managed to meet agreed service levels, security requirements and other quality standards.



Plans and manages the implementation of processes and procedures, tools and techniques for monitoring and managing the performance of technology services. Aligns the contribution of specified systems and services to clearly stated organisational and financial goals and performance targets. Recommends options for sourcing — whether in-house, outsourced, or a combination. Monitors performance of delivery teams and takes corrective action where necessary and in line with policies.

Availability Management:

Sets policy and develops strategies, plans and processes to ensure services deliver agreed levels of availability. Develops and implements new availability tools and techniques.

Information Systems Co-ordination:

Maintains awareness of the global needs of the organisation. Promotes the benefits that a common approach to technology deployment will bring to the business as a whole. Coordinates and collaborates with others on the promotion, acquisition, development, and implementation of information systems and services.

Performance Management:

Forms, maintains and leads workgroups and individuals to achieve organisational objectives. Determines and delegates objectives and task responsibilities to

individuals or teams — including people management responsibilities as appropriate. Sets the quality, performance and capability targets in line with organisational goals. Monitors performance and working relationships and provides effective feedback to address individual issues. Encourages individual development of skills and capabilities in line with team and personal goals. Facilitates the development of individuals by adjusting workload, targets, and team capacity. Plays an active role in formal organisational processes such recruitment, reward, promotion and disciplinary procedures.

Specialist advice:

Provides definitive and expert advice in their specialist area. Actively maintains recognised expert level knowledge in one or more identifiable specialisms. Oversees the provision of specialist advice by others. Consolidates expertise from multiple sources, including third-party experts, to provide coherent advice to further organisational objectives. Supports and promotes the development and sharing of specialist knowledge within the organisation.

Problem management:

Ensures that appropriate action is taken to anticipate, investigate and resolve problems in systems and services. Ensures that such problems are fully documented within the relevant reporting systems. Enables development of problem solutions.



Coordinates the implementation of agreed remedies and preventative measures. Analyses patterns and trends and improves problem management processes.

Project management:

Takes full responsibility for the definition, approach, facilitation and satisfactory completion of medium-scale projects. Provides effective leadership to the project team. Adopts appropriate project management methods and tools. Manages the change control process and assesses and manages risks. Ensures that realistic project plans are maintained and delivers regular and accurate communication to stakeholders. Ensures project and product quality reviews occur on schedule and according to procedure. Ensures that project deliverables are completed within agreed cost, timescale and resource budgets, and are formally accepted, by appropriate stakeholders. Monitors costs, times, quality and resources used and takes action where performance deviates from agreed tolerances.

Vulnerability assessment:

Plans and manages vulnerability assessment activities within the organisation. Evaluates and selects, reviews vulnerability assessment tools and techniques. Provides expert advice and guidance to support the adoption of agreed approaches. Obtains and acts on vulnerability information and conducts security risk assessments, business impact analysis and accreditation on complex information systems.

IT Infrastructure:

Provides technical leadership to optimise the performance of IT infrastructure. Investigates and manages the adoption of tools,

techniques and processes (including automation) for the management of systems and services. Oversees the planning, installation, maintenance and acceptance of new and updated infrastructure components and infrastructure-based services. Aligns to service expectations, security requirements and other quality standards. Ensures that operational procedures and documentation are fit for purpose and kept up to date. Ensures that operational issues are identified, recorded, monitored and resolved. Provides appropriate status and other reports to specialists, users and managers .

Systems Integration & Build:

Plans and drives activities to develop organisational systems integration and build capabilities including automation and continuous integration. Identifies, evaluates and manages the adoption of tools, techniques and processes to create a robust integration framework. Provides authoritative advice and guidance on any aspect of systems integration. Leads integration work in line with the agreed system and service design. Assesses risks and takes preventative action. Measures and monitors applications of standards. Contributes to the development of organisational policies, standards, and guidelines for systems integration.

Actively contributes to the University IT Community in order to share knowledge, best practice, and technical expertise.

Maintains up-to-date knowledge of the cyber-security landscape, including trends, emerging threats and attack vectors.

Person specification

Criteria	Essential	Desirable
Experience		
Proactive mitigation of cyber-security threats.	✓	
Responding to security attacks that have impacted IT infrastructure or users, on premise or in the cloud.	✓	
Implementing and managing enterprise firewall infrastructure.	✓	
Leading technical activities and associated teams with evidence of managing for quality results.	✓	
Sharing technical knowledge to support the development and learning of colleagues.	✓	
Line management or people management.	✓	
Implementation of other cyber-security platforms.	✓	
Skills		
Expert knowledge of the following: <ul style="list-style-type: none"> Enterprise network firewalls (FortiNet an advantage) Cyber-security threat landscape, including common attack vectors. 	✓	
Ability to develop new and innovative security platforms	✓	
Ability to effectively communicate technical ideas and security risks to colleagues with differing levels of technical knowledge.	✓	
Strong planning and co-ordination skills.	✓	

Person specification continued

Criteria	Essential	Desirable
Skills continued		
Able to build relationships at all levels of the organisation	✓	
Able to lead and manage a team	✓	
Good knowledge of the following: Security analysis solutions or platforms Other enterprise security platforms or services Azure infrastructure	✓	
Qualifications		
Degree level qualification/Level 7 vocational qualification		✓

Behavioural Attributes

This section summarises the behavioural attributes (or competencies) that we expect the role holder to be able to demonstrate, at what level and whether this is an essential or desirable requirement. Full definitions are at: <https://www.hr.admin.cam.ac.uk/policies-procedures/behavioural-attributes>.

Please review these and provide specific examples in your application of how you have demonstrated these attributes in your work, education or other experience. It will assist your application if you explain the situation, what you did and what the outcomes were.

Attribute	Level
Valuing Diversity	A
Achieving Results	A
Communication	B
Innovation and Change	B
Negotiating and Influencing	B
People Development	B
Relationship Building	A
Strategic Focus	B

Professional Services Values

Developed by professional services staff, our values underpin everything we do. By living the values in the work we do, we hope to foster an environment where staff feel empowered. The values encourage staff to; work together and share skills to create a sense of community, act with integrity, take an inclusive and fair approach and develop honest and open relationships that are underpinned by our shared values. We encourage applicants to consider these values within their application.



University Information Services



The UIS provides the digital infrastructure at the heart of the University’s world-leading education and research.

For example, our high performance computing team has developed the UK’s fastest academic computer and is supporting groundbreaking medical, engineering and astronomy research. Our networks team runs Europe’s biggest privately owned ultra-high speed fibre optic network, connecting researchers, students and other organisations across Cambridge and beyond. And, the University’s finance, HR and student administration rely on our business systems.

The University also has a bold ambition to use digitalisation to transform education and research. The UIS’s team of developers, designers, testers, analysts and support staff is leading this exciting work. Our work ensures Cambridge continues to be one of the world’s top universities.

The University of Cambridge consists of over 100 institutions (Departments, Faculties and Schools) and employs around 12,000 staff. The

Director of Information Services leads a University Information Services function which positively adds value to the University. For the delivery of a world – class computing service for all of the relevant stakeholder communities.

As a customer focussed organisation the purpose of UIS is to provide business information services that underpin the critical management processes used across the collegiate University in research, teaching and administration.

The UIS works strategically with Schools, Faculties, Departments, Colleges and other institutions, in planning and delivering the future information service requirements of the University, progressively improving business processes, capabilities and information solutions that meet business needs.

Terms of appointment

Tenure and probation

Appointment will be made on a permanent basis. Appointments will be subject to satisfactory completion of a probationary period of 9 months.

Hours of Work and Working Pattern

The hours of work for the position are full-time.

We welcome applications from individuals who wish to be considered for part-time working or other flexible working arrangements.

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefits 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 new part-time employees, annual leave will be pro rata'd based on days worked.

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.

Screening Checks

This role requires a basic disclosure and Barring Service (DBS) Check as well as a security check. Any offer of employment we make to you will be conditional upon the satisfactory completion of these checks; whether an outcome is satisfactory will be determined by the University.

Equality and Diversity

We particularly encourage women and /or candidates from a Black, Asian and Minority Ethnic background to apply for this vacancy as they are currently under-represented at this level within our University.

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, the Department Administrator, who is responsible for recruitment to this position.

The University

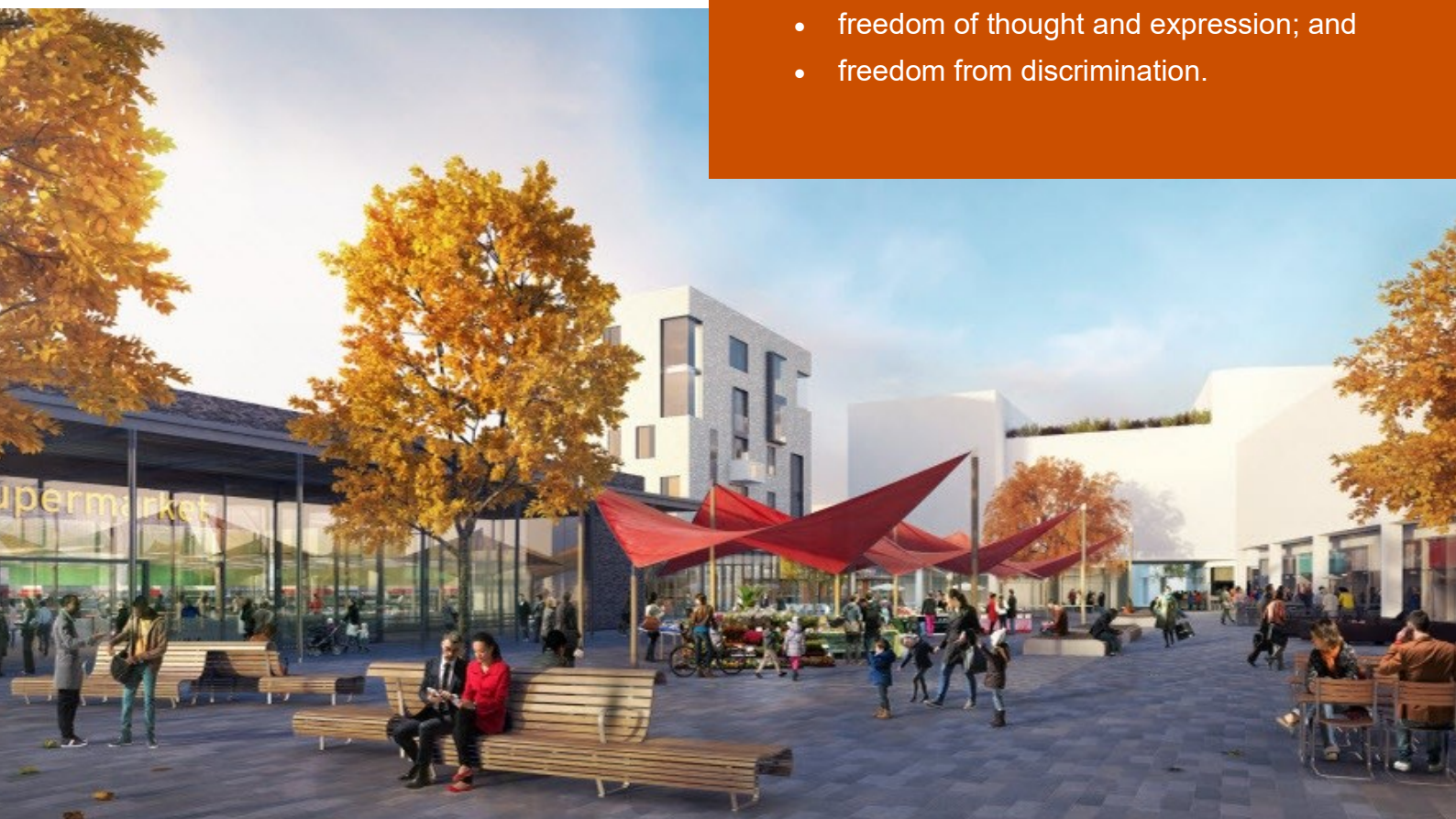
The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates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

Our sustained pursuit of academic excellence is built on a long history of world-leading 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 academic and commercial growth at both the West Cambridge Innovation District, and the Biomedical Campus in the south of the city. Eddington, in North West Cambridge, is a mixed-use development including key worker housing for staff, a community centre and a new primary school, managed by the University. Through these projects, the University is 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.

“Cambridge graduates and researchers have made – and continue to make – a colossal contribution to human knowledge and the understanding of the world around us. Their work touches on the lives and livelihoods of everyone from patients diagnosed with life-threatening diseases, to residents of areas critically affected by climate change, to children growing up in conflict zones. It has a lasting impact on our society, our economy and our culture: the world is truly a better place thanks to their efforts.”

Stephen Toope, Vice Chancellor 2019



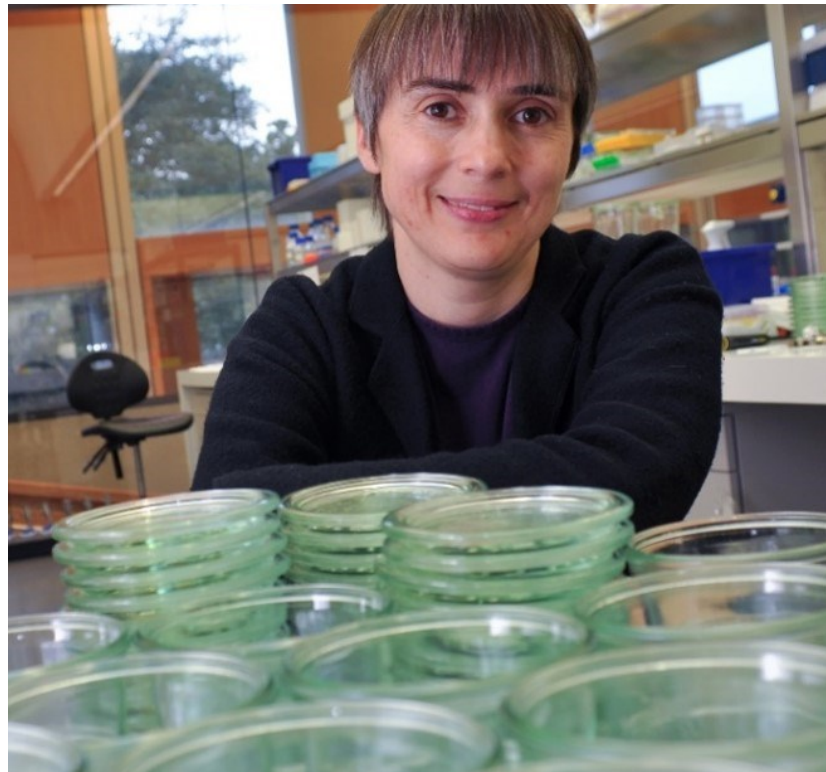
Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 23,000 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 groups, including the Women's Staff Network, Race Equality Network and LGBT+ Staff Network. More details are available here: <http://www.equality.admin.cam.ac.uk/>

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

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/RelocationService/>. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge. For staff who require a Skilled Worker Visa, Global Talent Visa or Settlement (known as indefinite leave to remain) to take up employment with the University, we offer an interest free [visa loan scheme](#) for current and prospective staff (and their dependants), to help meeting the cost of obtaining a visa.

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 paid emergency leave for parents and carers.

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 Postdoc Academy supports the postdoctoral community within Cambridge. Further details are available here: <https://www.postdocacademy.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. The University delivers The Festival of Wellbeing annually, which is a programme of stimulating talks and activities, which aim to promote wellbeing and good mental and physical health. The University also hosts the [Cambridge Festival](#), which is 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 as well as supporting their professional and career development on an ongoing basis. Our Personal and Professional Development (PPD) team provide development opportunities for all University employees, including face-to-face sessions, online learning modules and webinars. All employees also have unlimited access to LinkedIn Learning to support their development. Both new and existing employees can undertake funded Apprenticeships, which lead to a range of vocational and professional qualifications. 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. A range of University training providers also offer specialist learning and development in their own areas e.g. teaching and learning, digital literacy, finance, health and wellbeing, safety.



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 and should be directed to:

Ashley Culver, Security Operations Manager

Email: aec31@uis.cam.ac.uk

If you have any queries regarding the application process please contact recruitment@uis.cam.ac.uk, quoting vacancy reference **VC43356**

The closing date for applications is: **10th December 2024**