

Application Specialist (Student Systems)

University Information Services

Closing Date: 20th October 2024

Job Reference: VC43382



Application Specialist (Student Systems)

Salary:

£33,966—£44,263

Contract:

Permanent

Location:

Cambridge

Department:

Information Services

Responsible to:

Student Systems Technical
Manager

Working pattern:

Full-time

Purpose of the role

- To be a subject matter expert in the enterprise software applications within assigned business areas.
- To assist with the implementation, development and support of enterprise software applications for assigned business areas in operational and project settings.
- To review business requirements and use these to design and develop suitable technical software solutions using a wide variety of methods, software products and software tools.
- To support user testing of completed software, e.g. through training, and the production of documentation.
- To migrate fixes, patches and other developments between development environments in accordance with relevant change control processes.
- To take responsibility for providing 2nd and 3rd line support for the IT services of the department, including the solving of complex technical issues, and the analysis of security patches and upgrades.
- To contribute to transformative change in the shape of improved efficiency, use of automation and reduction of technical debt.

Key responsibilities

Specialist advice:

- Provides detailed and specific advice regarding the application of their specialism to the organisation's planning and operations.
- Actively maintains knowledge in one or more identifiable specialisms.
- Recognises and identifies the boundaries of their own specialist knowledge.
- Where appropriate, collaborates with other specialists to ensure advice given is appropriate to the organisation's needs.

Programming/software development:

- Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services.
- Contributes to the selection of the software development methods, tools and techniques.
- Applies agreed standards and tools to achieve well-engineered outcomes.
- Participates in reviews of own work and leads reviews of colleagues' work.

Application support:

- Maintains application support processes, and checks that all requests for support are dealt with according to agreed procedures.



- Uses application management software and tools to investigate issues, collect performance statistics and create reports.

Software design:

- Designs complex software applications, components and modules.
- Uses appropriate modelling techniques following agreed software design standards, guidelines, patterns and methodology. Creates and communicates multiple design views to balance stakeholders' concerns and to satisfy functional and non-functional requirements. Identifies, evaluates and recommends alternative design options and trade-offs.
- Models, simulates or prototypes the behaviour of proposed software to enable approval by stakeholders, and effective construction of the software. Verifies software design by constructing and applying appropriate methods.
- Reviews, verifies and improves own designs against specifications. Leads reviews of others' designs.

Systems design:

- Designs system components using appropriate modelling techniques following agreed architectures, design standards, patterns and methodology.
- Identifies and evaluates alternative design options and trade-offs. Creates multiple design views to address the concerns of the different stakeholders and to handle functional and non-functional requirements.
- Models, simulates or prototypes the behaviour of proposed system components to enable approval by

stakeholders.

- Produces detailed design specifications to form the basis for the construction of systems. Reviews, verifies and improves own designs against specifications.

Database design:

- Implements physical database designs to support transactional data requirements for performance and availability.
- Develops and maintains specialist knowledge of database and data warehouse concepts, design principles, architectures, software and facilities.
- Assesses proposed changes to object/data structures and evaluates alternative options.
- Implements data warehouse designs that support demands for business intelligence and data analytics.

Data modelling and design:

- Investigates enterprise data requirements where there is some complexity and ambiguity.
- Plans own data modelling and design activities, selecting appropriate techniques and the correct level of detail for meeting assigned objectives.
- Provides advice and guidance to others using the data structures and associated components.

System software:

- Monitors system software metrics and adjusts configurations for optimum availability and performance.
- Reviews system software updates and identifies those that merit action.
- Configures system software for required functionality and performance.



- Investigates and resolves system software problems, requesting action from supplier if required.

Incident management:

- Ensures that incidents are handled according to agreed procedures.
- Prioritises and diagnoses incidents. Investigates causes of incidents and seeks resolution. Escalates unresolved incidents.
- Facilitates recovery, following resolution of incidents. Documents and closes resolved incidents.
- Contributes to testing and improving incident management procedures.

Problem management:

- Initiates and monitors actions to investigate and resolve problems in systems, processes and services.
- Determines problem fixes and remedies.
- Collaborates with others to implement agreed remedies and preventative measures.
- Supports analysis of patterns and trends to improve problem management processes.

Release and deployment:

- Uses approved tools and techniques for specific deployment activities.
- Administers the recording of activities, logging of results and documents technical activities undertaken.

Systems integration and build:

- Defines the software modules needed for an integration build and produces a build definition for each generation of the software.
- Accepts completed software modules, ensuring that they meet defined criteria. Produces software builds from software source code for loading onto target hardware.
- Configures the hardware and software environment as required by the system

being integrated. Produces integration test specifications, conducts tests and records and reports on outcomes.

- Diagnoses faults and records and reports on the results of tests. Produces system integration reports.

User experience design:

- Applies standard techniques and tools for designing user interactions with and experiences of selected system, product or service components.
- Reviews design goals and agreed security, usability and accessibility requirements. Creates storyboards, static wireframes and dynamic or workable prototypes.
- Assists, as part of a team, with overall user experience design.
- Assists in the evaluation of design options and trade-offs. Consistently applies visual design and branding guidelines.

Learning Delivery:

- Delivers learning activities to a variety of audiences using prepared materials to meet established learning objectives.
- Uses established guidelines for the preparation of the environment. Assists with the development and maintenance of examples and case study materials.
- Appropriately uses a range of learning delivery techniques to enable learners to develop skills, capability, techniques and required knowledge.
- Observes learners performing practical activities and work. Advises and assists where necessary. Provides detailed instruction where necessary and responds to questions, seeking advice in exceptional conditions beyond own experience.

Networking:

- Member of the University IT Community in order to share knowledge, best practice, and technical expertise.

Person specification

Criteria	Essential	Desirable
Experience		
Evidence of reviewing and working to strategic technical plans which deliver department-wide change.		✓
Evidence of developing and applying an understanding of new technology to deliver business results.	✓	
Evidence of effectively sharing technical knowledge and skills to improve knowledge within a team and user community.	✓	
Evidence of working at an operational level to deliver a technology change.	✓	
Evidence of working on successful technical change in operational and project settings using various methodologies.		✓
Demonstrable experience of IT, coaching and mentoring others.	✓	
Skills		
Demonstrable knowledge in several relevant programming languages used in the development of IT systems.	✓	
Demonstrable knowledge of front-end/web development tools and techniques.	✓	
Demonstrable knowledge of system design and integration.	✓	
Demonstrable knowledge of database design, SQL and performance tuning.	✓	
Knowledge of user experience and accessibility concepts.		✓
Demonstrable knowledge of approaches to data and system security.		✓
Practical understanding of ITIL incident and problem management concepts.		✓

Person specification continued

Criteria	Essential	Desirable
Skills continued		
Demonstrable knowledge of building complex system integrations.		✓
Strong planning skills.	✓	
Strong ability to build relationships at all levels of the organisation.	✓	
Able to communicate effectively orally and in writing.	✓	
Ability to develop and maintain their own knowledge in their field.	✓	
Qualifications		
Degree level qualification/Level 6 vocational qualification or equivalent experience.	✓	
Additional requirements		
Values diversity and difference and encourages others to do the same. Operates with integrity and openness.	✓	

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	B
Communication	C
Innovation and Change	C
Negotiating and Influencing	C
People Development	C
Relationship Building	B
Strategic Focus	C

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 6 month probationary period.

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.

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

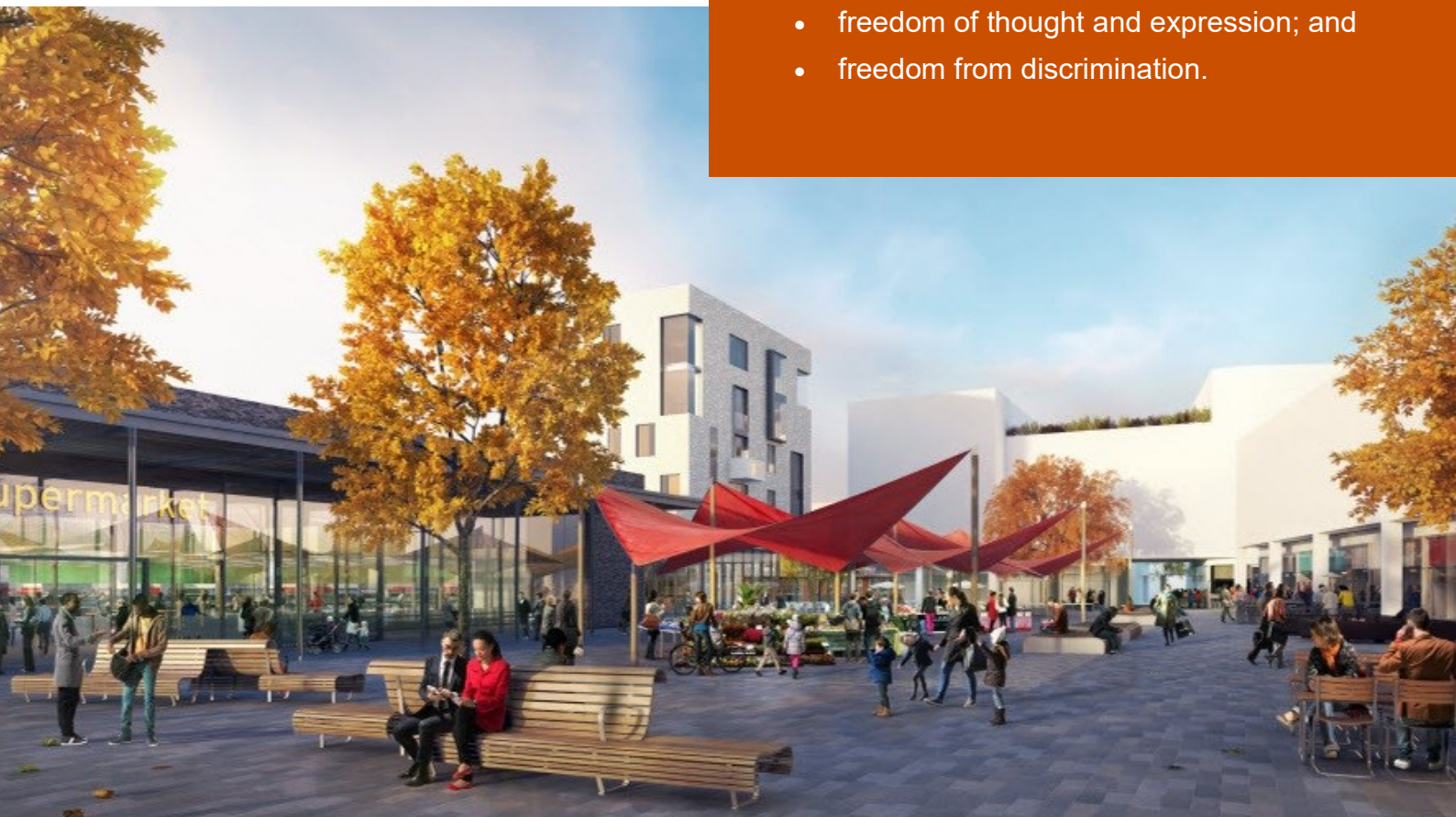
The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates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



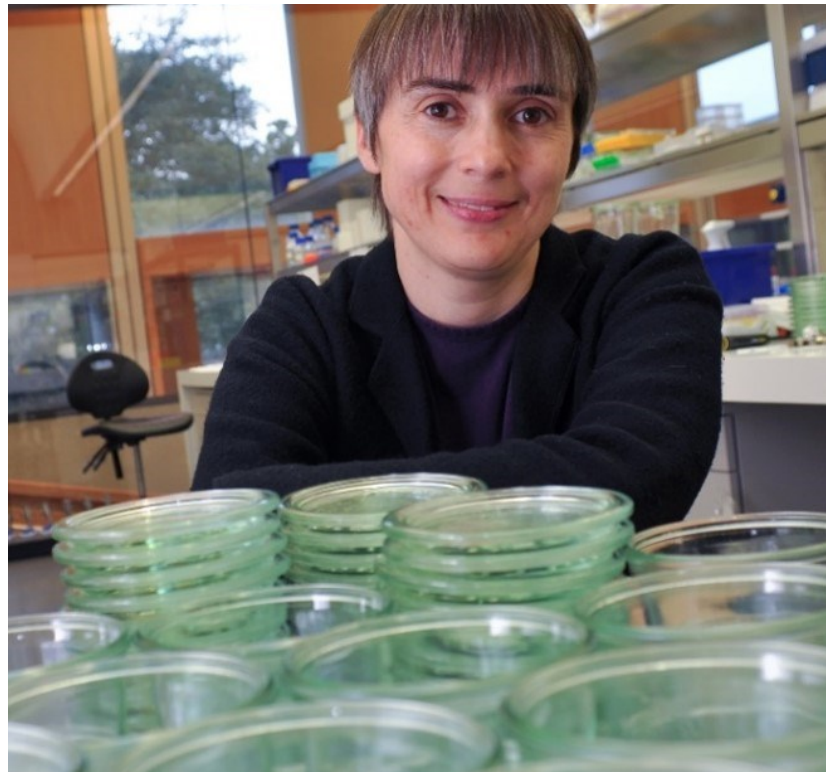
Working at the University

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:
Chris Hay, Technical Manager & Service Owner (Student Systems)

Email: chris.hay@uis.cam.ac.uk

If you have any queries regarding the application process please contact recruitment@uis.cam.ac.uk, quoting vacancy reference **VC43382**

The closing date for applications is: **20 October 2024**