

# CANDIDATE PACK

Network Engineer:  
Infrastructure, Data &  
Telecoms (IDT)

Information Systems & Support (ISS)

UNIVERSITY OF  
WESTMINSTER 



# OUR UNIVERSITY

Under the inspirational leadership of Professor Peter Bonfield OBE, the University of Westminster is a place where discoveries are made, barriers are broken, diversity is celebrated and where everyone is welcome. Serving more than 21,000 undergraduate, postgraduate, apprentice and executive students, our mission is to transform the lives of young people from all backgrounds. We seek to make the world a more inclusive, sustainable, better and healthier place through our educational, research and knowledge exchange endeavours.

Since our founding in 1838 we have stood out as innovators, committed to tackling social inequalities. In 2021, our University ranked 2nd in England out of more than 100 higher education institutions for social mobility. The ranking - produced by the Institute for Fiscal Studies and the Sutton Trust - compares the number of students from low-income backgrounds at universities, and the extent to which their studies helped them to move up the income ladder. Westminster has the second highest performance among universities in England.

As we focus forward to 2029, we will continue to do so in a way that is true to our progressive, compassionate and responsible values. Our education offer will be more personalised and authentic, giving students from all backgrounds an opportunity of transformative learning, helping them succeed in their studies and professional lives. Our curriculum will be employability-linked, leading to stronger outcomes and helping prepare our graduates for the world of work and for life. Our research and knowledge exchange will enable us to maximise our positive impact on societies in the UK and around the world in an environment where everyone is inspired to succeed. Our priorities of wellbeing, inclusion and sustainable development will help us as we navigate through the challenges and opportunities towards 2029.



# OUR PRIORITIES

The University's 2022-2029 strategy, *Being Westminster*, sets us apart and builds on our unique history and achievements. In our University, we value social justice, moral conscience, inclusivity and equality, acting positively together to make change for good.

The University of Westminster has three priorities.

## WELLBEING

Working and studying together at Westminster as a community of students and colleagues is a big part of our lives – doing so in an environment that places our wellbeing front and centre helps us to be safe and feel safe. We care for the safety, health and wellbeing of those around us as well as ourselves.

## INCLUSION

All Westminster, colleagues and students are in a supportive and safe learning and working environment which is equitable, diverse and inclusive, is based on mutual respect and trust, and is a place where harassment and discrimination are not tolerated. As a responsible institution, we strive to ensure and to champion equality. As a progressive institution, we take pride in our diversity. As a compassionate institution, we commit to an inclusive culture that allows students and colleagues to reach their full potential.

## SUSTAINABLE DEVELOPMENT

We take inspiration from the 17 United Nations' Sustainable Development Goals (SDGs) in how we drive our actions and activities and governance across our University. As a community, we bring together our collective energies to play our part in addressing the climate crisis and inequalities to enable a more sustainable and socially just world. We are one of the top 20 universities in the world in SDG 5 for providing equal access and supporting the academic progression of women. We are one of the top 25 universities in the world in SDG 10 tackling economic, health based and international inequalities. We are in the top 50 universities in SDG 12 for promoting resource and energy efficiency, having a sustainable infrastructure, and providing access to basic services for all.



# OUR OBJECTIVES 2022-2029

Against a backdrop of a changing and challenging higher education environment, the University has recently completed a major review of its objectives and strategy, and has published its commitments for the period 2022-29.

## EDUCATION

We will offer personalised and authentic education, underpinned by an inclusive curriculum, to enable all our students, from all backgrounds, to engage in transformative learning and to succeed in their studies and professional lives. We will address global, political, and social challenges through a relevant demand-led and forward-looking portfolio. We will do this by offering authentic teaching, learning and assessment modes which immerse students in the wider-world through live projects, work-based learning and global opportunities. We will invest in our people to enable all teaching colleagues to plan and deliver exceptional learning experiences and professional colleagues to offer exceptional support. Students will be empowered by working in partnership with colleagues and fellow students to shape the Westminster experience. We will develop an integrated physical and digital environment that supports excellent practical, active and collaborative learning for all our students.

## RESEARCH AND KNOWLEDGE EXCHANGE

Research and knowledge exchange are fundamental to our commitment to making a positive difference to the world and transforming lives. We are committed to research in four priority areas: Diversity and Inclusion; Health Innovation and Wellbeing; Sustainable Cities and the Urban Environment; Arts, Communication and Culture. Our excellence in research and knowledge exchange will infuse our education endeavour, inspiring and equipping our students as agents of change locally as well as globally. We will continue to grow our community of PhD researchers, ensuring that the Westminster postgraduate research experience remains sector leading and the foundation for great careers. In knowledge exchange we will focus on engagement with government, business and with the public and local community. We will achieve more when we identify shared interests and build partnerships with our communities and collaborate for the public good with a clear civic purpose.

## EMPLOYABILITY

We will ensure that all our students benefit from employability-led learning and purposeful engagement with employers, business and industry, to give students from every background the best possible preparation for the world of work and enable the best possible employability outcomes. We will do this through the further extension and embedding of programmes such as work-based and placement learning; the Westminster Employability Award; Westminster Working Cultures; mentoring; and student enterprise. Employability-related learning will be a core and critical part of the courses and curriculum we offer, right across the University. It will be front and centre of life at the University for students and colleagues.



A key priority will be the development of a dedicated Centre for Employability and Enterprise at 29 Marylebone Road, intended to transform our student experience and our engagement with business, industry and employers. The Centre will provide a game-changing experience through which undergraduate and postgraduate students from across Westminster will come together and practise enterprise; develop an entrepreneurial mindset and skills; access training, work, projects, business advice and mentoring; and connect directly with employers. The future-focused environment of the Centre will scale up our employability provision, helping our students to be 'fit for the future' in the most challenging of post-pandemic labour markets and economic environments. It will strengthen links between our UK-based and international employer partners and our motivated, bright, work-ready students, affording employers access to a diverse mix of people right for the needs of the contemporary workforce.

## GLOBAL ENGAGEMENT

We will raise the international reputation and reach of the University, ensuring that 30% of our undergraduate community and 70% of our taught postgraduates come to us from overseas. Overseas partnerships will remain central to our global engagements. We will prioritise the outward mobility of our students to partner institutions, contributing to students' development of employability skills and competences. We will extend and deepen our Trans-National Education relationships. These partnerships, particularly that with Westminster International University in Tashkent, will move beyond franchised or validated arrangements to embrace employability, alumni-related research, CPD and knowledge exchange connections.



# OUR STRUCTURE

## ACADEMIC STRUCTURE

Our structure is built to deliver an enhanced learning environment, stronger and broader industrial, international and professional connections and pioneering and impactful research. The University comprises three Colleges:

### Westminster Business School

- School of Organisations, Economy and Society
- School of Finance and Accounting
- School of Applied Management
- School of Management and Marketing

### Design, Creative and Digital Industries

- School of Architecture and Cities
- Westminster School of Arts
- School of Computer Science and Engineering
- Westminster School of Media and Communications

### Liberal Arts and Sciences

- School of Social Sciences
- Westminster Law School
- School of Humanities
- School of Life Sciences

The University Executive Board comprises:

- Vice Chancellor and President
- Deputy Vice Chancellor (Employability and Global Engagement)
- Deputy Vice Chancellor (Education and Students)
- Deputy Vice Chancellor (Research and Knowledge Exchange)
- Chief Operating Officer and University Secretary
- Three Heads of College

## PROFESSIONAL SERVICES

Our Professional Services teams support the effective and professional delivery of our teaching, research and knowledge exchange and the management of student residences and sports facilities.

- Academic Registry
- Business Engagement
- Estates
- Finance and Commercial Activities
- Global Recruitment, Admissions, Marketing and Communications
- Information Systems and Support
- People, Culture and Wellbeing
- Strategy, Planning and Performance
- Student and Academic Services



# JOB DESCRIPTION

**Job Title: Network Engineer: Infrastructure, Data & Telecoms (IDT)**

**Reports to: Team Lead: IDT**

**Department: Information Systems & Support (ISS)**

**Grade: NG6**

## ROLE PURPOSE

The post holder will be an active member of the Infrastructure, Data & Telecoms Team actively contributing to the planning, installation and maintenance of University network infrastructure services delivered against an ITIL quality management framework.

## PRINCIPAL ACCOUNTABILITIES

1. Take responsibility for the day-to-day operational configuration, installation, management and on-going support for all active network hardware including edge and core switches, core and border routers; play an active role in the development of network infrastructure and associated projects.
2. Take responsibility for the day-to-day operational configuration, installation, management and on-going support for all active hardware associated with wireless network services including wireless controllers and wireless access points; play an active role in the development of wireless network infrastructure and associated projects.
3. Take responsibility for the operational support and development of network management systems associated with both core and edge network infrastructure and wireless networking systems; provide proactive monitoring of network services through the use of network management and monitoring systems ensuring that all devices are configured, visible, and actively accessible both internally and externally.
4. Take responsibility for the day-to-day operational configuration, installation, management, and on-going support for all active hardware associated with IP Telephony systems including voice switches, voice gateways, operator systems, and contact centre technology; play an active role in the development of active voice infrastructure and associated projects; provide support for all activities requiring telephony services on a seasonal basis such as clearing and enrolment etc.
5. Take an active role in the coordination and collaboration with external support partners for both network and telecommunications infrastructure services, and systems in the



effective delivery and support of 3rd party services ensuring that all parties are able to provide a quick and effective response when issues arise.

6. Coordinate the on-going support of the existing data cabling infrastructure along with planning and installation of new cabling to specified standards working in conjunction with Estates & Facilities colleagues and external cabling contractors to ensure health and safety requirements are met.
7. Participate as part of the broader IDT group to ensure that the network is properly managed, well documented and kept up to date to support both Business Continuity and Disaster Prevention/Recovery plans, ensuring that all associated documentation, diagrams, and schematics are provided in a timely and efficient manner; embrace new networking requirements and standards and keep up to date with emerging network and telecommunication technologies.
8. Work collaboratively within Information Systems and Support and across all University departments in the support and delivery of IT services, with particular focus on close integration between ICT Operations, ICT Developments, and IT Service Management groups to promote business continuity, sustainability and corporate social responsibility.
9. Take responsibility for the monitoring and progression of requests for network and telecommunications assistance and expertise and ensure that users and other interested parties are kept informed; take an active role in the resolution of users service problems; note and investigate problems and identify performance trends; take corrective action to improve performance and to avoid problems arising; provide trouble shooting support for network and telecommunications systems as required, responding in a timely manner support queries from the Service Desk.
10. Contribute to ISS projects, delivering technical expertise and advice within project related teams.
11. Maintain an up-to-date knowledge of appropriate systems and technologies and participate in vendor and sector interest groups and forums in order to be able to contribute to the technical roadmap for the systems within your ownership.
12. Undertake any other duties as appropriate within the post holder's competence as required by the Team Lead from time to time.

## CONTEXT

ISS delivers a comprehensive portfolio of ICT services to the University's user community of 20,000 students and staff across a number of sites in the West End of London and Harrow. The ISS Directorate supports the IT service delivery life-cycle encompassing ICT





Developments, ICT Operations, Service Management [including Service Delivery] and Business Transformation all underpinned by Service Management, Business Relationship Management functions.

The ICT Operations team is composed of three teams: Enterprise Systems Operations (ESO), Business Systems Operations (BSO) and Infrastructure, Data & Telecoms (IDT).

The ESO, BSO and IDT teams are focused on the ongoing day-to-day management and maintenance of the infrastructure, systems and applications that is used to deliver and support services and to operationalise technology enablement to support and enhance the user experience and to deliver the operational excellence and efficiency that underpins this.

The post-holder will play a significant role with “people, processes, technology”, in building a successful team to deliver on the strategic roadmap for enterprise systems in supporting the university agenda of digital transformation.

The post holder will join us at an exciting and demanding time with accountability for a significant function, building and shaping it to deliver the Universities ambitious objectives. You will engage, challenge and deliver to meet the requirements of our long and short-term plans.

The ICT Operations team will work closely with the ICT Development team who are responsible for optimising the staff and student journey and maximising operational efficiency through the design, development and effective exploitation of enterprise technologies in response to evolving business requirements.

As well as representing the team on matters internally, s/he will also be expected to represent and promote the University externally with peers at other HE/FE institutions and in the JISC community.

The post holder will report directly to the Team Lead: IDT and s/he will be part of the IDT Team within the wider IT Operations group working to ensure the operational support and development of both network & telecommunications infrastructure services.

Ensuring the ongoing operation of the University's ICT infrastructure has become increasingly critical to underpin those services and systems which support the successful delivery of Teaching and Learning with networking, wireless, L4/7 application load balancing and IPT technologies supporting core enterprise services.

The University continues to invest consistently in the development of network and telecommunications infrastructure in line with agreed University and departmental strategies and operational plans. The group continues to ensure that it is able to take advantage of leading edge developments within industry and which will be beneficial to the delivery of ICT services across the estate.

Current network and telecommunications services are delivered via:



- High capacity Brocade Core routers running MPLS and VRRP to underpin the delivery of core enterprise services.
- HPE Procurve, FlexNetwork routers and edge switches delivering 1Gb and Power Over Ethernet to the LAN.
- Netscaler load balancers supporting high availability of services.
- Border Gateway routers supporting connectivity to Janet and the wider Internet via resilient BGP peering's.
- Resilient meshed WAN design delivering 1Gb and multiples of 1Gb and 10Gb inter site connectivity to support high availability of services and system operating within the data centres.
- DNS and DHCP services running on Bluecat resilient infrastructure.
- Wireless services delivered across a resilient Aruba infrastructure offering a range of connectivity speeds up to 802.11ac and utilising the Janet eduroam service and an in house visitor WiFi provision.
- A range of network traffic and capacity management systems to administer services including HPE IMC platform.
- Telephony services delivered across an Alcatel Lucent Voice over IP system utilising intelligent handsets, operator suite, call centre environment and mobile devices.
- Resilient telecoms network services utilising multiple routes to operator networks including SIP trunking and session border controllers.

The post holder will be expected to play an active role in the coordination, development and day-to-day support network services throughout the University with over 20,000 switch ports, circa 190 L2 switches, 15 L3 routers, 600 wireless access points delivering 802.11ac technologies utilising the JISC eduroam service. This will include site surveys for new wireless provision, configuration and installation of wireless infrastructure and rogue wireless detection and suppression. S/He will ensure all network services are by nature designed and delivered with resiliency and high availability providing BCP/DR processes for core data centre networking, external Internet connectivity, wireless services and the IP Telephony system.

The post holder will be involved in a variety of projects that can range from small one week roll outs of a new service, to much longer and large scale network and telecommunications deployments, and will be expected to follow and monitor the change control procedures that are used within the University.

Close coordination with technical security colleagues is required to ensure the integrity of all network systems and to support them with the implementation and operation of security related infrastructure such as Firewall, Intrusion Detection/Prevention, and security management platforms.



The post holder will be expected to configure a range of active and passive hardware across the University estate and as such will be expected to participate in lifting and handling equipment and working at height.

The post holder will be expected to take every opportunity to nurture cross- team project working and to develop a culture of sharing knowledge and information throughout ISS. S/he will work closely with the Team Leader in the delivery and ongoing operational support of the network and telecommunications infrastructure and will also be expected to foster strong working relationships with key University staff as well as external contractors and consultants on the delivery of new cabling services.

## DIMENSIONS

**Staffing:** The post holder has no line management responsibilities, they may also be involved in mentoring and training colleagues in his/her own areas of knowledge or expertise. They will be expected to offer advice, induction, training, guidance to staff within ICT Operations.

**Budget:** The post holder will support the planning and monitoring budgets related to Infrastructure, Data & Telecoms systems, services and licences.

**Hours:** The post holder will work 35 hours per week between the service hours of 08:00 and 18:00, the post holder may be required to work evenings and weekends from time to time where project/operational needs demand; this will be agreed by prior arrangement.

**Location:** All University appointments are made on the understanding that staff may be asked to serve at any of the University's sites should the need arise. The post holder must also work in accordance with any agreed service levels.

**Professional Development:** The University of Westminster is committed to continuous professional development, and the post-holder will be encouraged to participate in professional activities and to develop new skills where necessary.

**Health and Safety:** The post holder is required to have an understanding of individual health and safety responsibilities and an awareness of the risks in the work environment, together with their potential impact on both individual work and that of others.



# PERSON SPECIFICATION

## QUALIFICATIONS

### Essential

Educated to degree level or equivalent experience.

Vendor accredited network qualifications e.g. Cisco CCNA, Brocade BCNE, HP ASE -Network Infrastructure

ITIL certification (foundation level or above).

### Desirable

At least one relevant professional qualification from ITIL (IT Infrastructure Library) or Prince 2 Project Management

A qualification in wireless networking

Appropriate professional body membership or certification of skills

## TRAINING AND EXPERIENCE

### Essential

Demonstrable experience in the development and operational support of data networks with large multi-site environments

Experience of working in an ITIL based environment with emphasis on change control, incident management, etc.

Prior experience and working knowledge of configuring and deploying wireless networking services and systems and of conducting wireless site surveys

Prior experience and working knowledge of configuring and deploying edge and core switches/routers operating at L2/L3 of configuring and deploying edge and core switches/routers operating at L2/L3

Proven experience of working with external contractors on the delivery of data-cabling infrastructure  
Proven working knowledge of IP telephony systems, voice switches and associated voice protocols

Proven working knowledge of network services and system network services and systems

Good working knowledge of networking protocols with particular emphasis on TCP/IP, OSPF, DNS/DHCP, IP



Telephony, PoE, 802.1q, QoS, Multicast, Etc

Demonstrable knowledge and experience of networking design, configuring and deploying core routers and edge switches operating at L3/L2

Experience and working knowledge of network management and services and systems

Demonstrable knowledge and experience of networking protocols with particular emphasis on TCP/IP, BGPv4, MPLS, VRRPE, OSPF, DNS/DHCP, IPv6, 802.1q, QoS, PoE, Multicast, 802.11ac wave2, RADIUS

Proven experience of managing priorities and working on large projects

### **Desirable**

Some experience of application aware firewalls

Some experience and knowledge and experience of highly available application load balancers operating at L4-L7

Some experience Business Continuity and Disaster Prevention/Recovery

Some knowledge and experience of working with mobile telephony providers

Some experience of writing scripts to automate reporting and maintenance activities

Some experience of working with authentication services such as RADIUS, TACACS+

Some experience of working with Internet based routing protocols such as BGP

Some experience of working with highly available application load balancers operating at L4-L7

Some knowledge and understanding of security issues relating to networks

## **APTITUDES, ABILITIES AND PERSONAL ATTRIBUTES**

### **Essential**

Strong IT/technical skills and aptitude; desire to keep abreast of changes in the



market.

Customer-oriented and innovative approach to service design and delivery.

Effective written and oral communications skills, including report writing and presentation skills.

Good influencing and interpersonal skills and the ability to negotiate and broker solutions.

Ability to work to set objectives and agreed timescales and work under pressure to tight deadlines

Ability to cope with rapid change

Positive attitude with initiative and drive.

Ability to cope effectively with pressure.

Ability to learn quickly.

Good problem solving skills.

Good communication skills with people from a wide variety of backgrounds; proficient in receiving and explaining complex ideas with clarity and of presenting technical information to nontechnical audiences

Able to provide direction and influence/ persuade others to take a specific course of action when there is no direct line of command or control

A positive advocate for change; not afraid to propose innovative and potentially difficult solutions; sensitive to the impact of change on others

Ability to continuously maintain and develop a knowledge and expertise in relevant areas

Methodical, calm and clear-thinking under pressure  
Flexibility to work out of hours on occasion to meet user or service expectations. Fully committed to creating a stimulating learning and working environment which is supportive and fair, based on mutual respect and trust, and in which harassment and discrimination are neither tolerated nor acceptable.

Willingness to work long hours on occasion

Willingness and flexibility to undertake overnight stays, occasional weekend working, and international travel, as required



# HOW TO APPLY

To apply for this vacancy, please visit our [vacancies page](#) where you will be able to download our application form template. You will then be requested to complete a quick registration before being able to upload completed application form and any supporting documentation.

## Applications should include:

- A concise statement in support (ideally no longer than two pages), addressing the criteria in the Person Specification and motivation for applying.
- You may also include an up to date curriculum vitae;
- names and contact details of two referees (although referees will only be approached at offer stage).

**The deadline for receipt of applications is midnight on 05 December 2024**

**Interviews will take place on 17 December 2024.**

An appointment will be made subject to proof of eligibility to work in the UK and satisfactory references being obtained.

At the University of Westminster, diversity, inclusion and equality of opportunity are at the core of how we engage with students, colleagues, applicants, visitors and all our stakeholders.

We are fully committed to enabling a supportive and safe learning and working environment which is equitable, diverse and inclusive, is based on mutual respect and trust, and in which harassment and discrimination are neither tolerated nor acceptable.

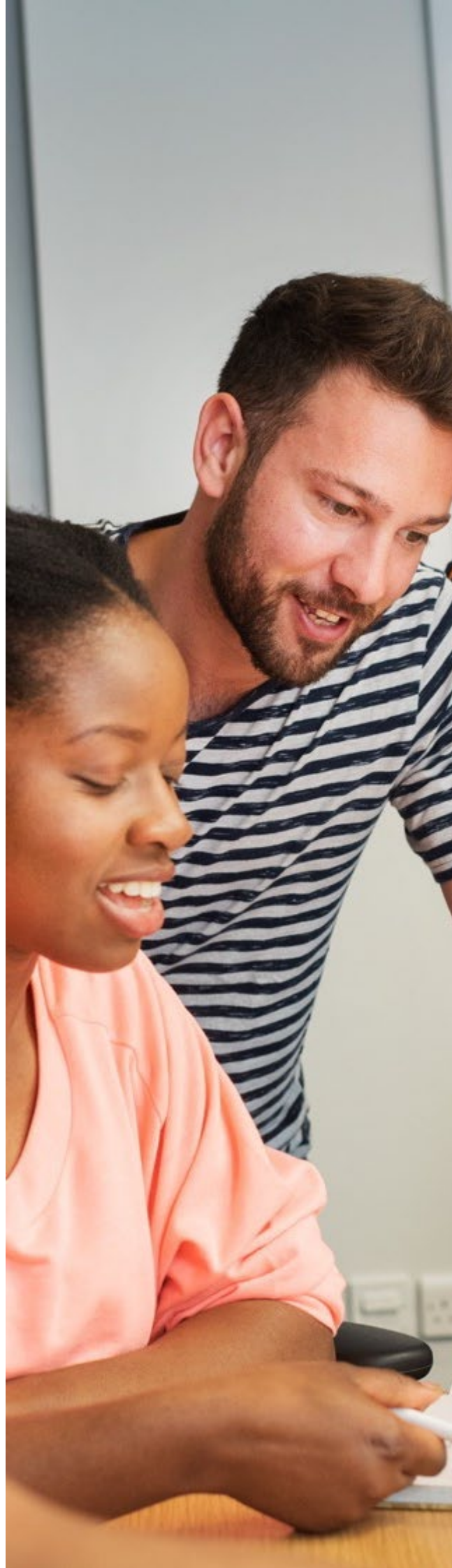
*The University has adopted Smart Working principles to support and further our Equality, Diversity and Inclusion aims of being an inclusive, collaborative and flexible employer. Further details of Smart Working can be discussed at interview stage.*



# OUR BENEFITS

The University offers a range of wellbeing and work-life balance benefits to recognise and reward the essential contribution our colleagues make to success and growth. Our benefits are inclusive for colleagues of all backgrounds including LGBTQ+ colleagues, disabled colleagues, pregnant colleagues, parents and carers, as well as colleagues of all genders, age, ethnicities, nationalities, religion and beliefs, and marriage and civil partnership status.

- 35 days annual leave per year, plus bank/national holidays and University of Westminster closure days (pro-rata for part-time staff).
- A generous occupational pension scheme.
- Annual incremental progression and/or cost of living reviews.
- Generous maternity, paternity and adoption leave.
- Flexible working and smart working.
- Learning and development opportunities.
- Free membership rates for a wide range of sporting facilities, including gyms at Regent Street and Harrow campuses, as well as the Chiswick Sports Ground.
- Employee assistance programme.
- The opportunity to participate in other attractive employee benefit schemes such as Cycle to Work, Eye Care Vouchers, Season Ticket Loans, and Give As You Earn.







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