

# CANDIDATE PACK

## Fabrication Lab Assistant Technologist

Design, Creative and Digital Industries

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: Fabrication Lab Assistant Technologist**  
**Reports to: Fabrication Lab Director**

Department: Design, Creative and Digital Industries

Grade: NG3

## ROLE PURPOSE

To support the academic delivery of College activities (e.g. teaching, research, CPD and knowledge exchange activities) by assisting with the provision of a high quality and customer-focused technical service to colleagues, students and external clients/users.

## PRINCIPAL ACCOUNTABILITIES

1. To work as a member of the multi-disciplinary Fabrication Lab team, assisting in delivering a range of customer-focused technical services within the College and providing support for the core activities of the College (teaching, research and knowledge exchange) and its users.
  - To supervise access to machines (e.g. Laser Cutters), operate machines on behalf of Lab Users (e.g. Large Format Printers), and serve materials and tools for sale or loan, charging according to Lab rates for materials and machine time.
  - To assist with the training of student Lab Assistants and over-see their provision of a professional and user-centred service to Lab Users
  - To manage online booking schedules according to standard protocols to ensure optimal use of Lab capacity and resources.
2. To comply with all relevant Health and Safety requirements in the designated technical services area and, under the supervision of more senior colleagues, monitor users' safe usage of all equipment and materials, escalating any complex Health and Safety concerns to the line manager when necessary.
3. To provide a basic demonstration of the safe and correct use of equipment and materials, on both an ad-hoc basis and during scheduled practical sessions throughout the year, maintaining appropriate records that this demonstration has taken place.
4. To provide technical support for the safe and productive use of the Fabrication Lab and for preparing workshops and training classes throughout the calendar year. Such technical support includes (but is not limited to):
  - Over-seeing the safe and correct use of tools by appropriately trained students and colleagues, providing additional ad hoc support and advice about safe and best practices as required;





- Supporting specific fabrication techniques and software skills relevant to the postholder's specialisms;
  - Assisting users in the production of both development and presentation quality work in a variety of materials and advising users on potential manufacturing and materials considerations;
  - Assisting in the preparation and mounting of internal/external exhibitions and events to showcase work and projects fabricated in the Lab;
5. To assist in keeping the designated technical service area clean, safe and fully operational. To assist, as a member of the Lab team, in the regular inspection and basic maintenance of equipment in the designated technical service area to ensure that it conforms to required Health & Safety standards.
  6. To maintain an inventory of stock/materials in the designated technical services area and work with the Fabrication Lab team in a timely manner to maintain optimum levels throughout the year. To take responsibility for charging for materials and machine time in accordance with pre-agreed and published tariffs.
  7. To participate in and contribute to team meetings. To undertake relevant continuous professional development activities to maintain up to date knowledge and skills in the designated specialism.
  8. To undertake any other duties within their competence and appropriate to the grade, as required by the line manager or their nominee.

## CONTEXT

The Fabrication Lab is an award-winning specialist lab and innovative centre for teaching, research, and knowledge exchange within the College for Design, Creative and Digital Industries. Over the past ten years, it has evolved to combine and unify diverse workshops, labs, and other areas previously part of the Faculty of Architecture and the Built Environment. The Lab has benefited from multimillion-pound investment and now offers state-of-the-art tools and digital technologies, exemplary, purpose-built spaces, and an excellent working environment.

The purpose of the Lab has been for more than a decade to teach and research the technology ecosystem for the design and construction of the built environment and to enable the manufacture and testing of models, materials, details and 1-1 prototypes using various materials, processes and contemporary digital technologies. Its aims have been to facilitate speculation, experimentation, and innovation of new ideas and technologies for architectural design and construction. The Fabrication Lab is, however, currently undergoing an expansion of its capabilities and the development of its programmes to accommodate a wider use of the advanced technologies it offers, and will over the coming years greatly expand the use by students and colleagues to include the whole of the Westminster Business School.

Facilities within the Lab include traditional machine shops for working with wood and metal and various contemporary digital fabrication tools and technologies ranging from 3D printers through CNC mills and routers to 7-axis robotic arms. It includes a traditional casting studio and equipment for material and structural testing. The Lab equally encompasses digital capture, representation and physical printing. It has numerous tools, from 3D scanners to a photographic studio, including a specialist artificial sky and heliodon for the environmental analysis of architectural designs using physical models.





The lab has an extensive virtual, augmented and mixed reality lab, and is extending its capabilities in this area by introducing a new immersive technology studio. It is also currently developing its capabilities for digital stills and video with the introduction planned for a new virtual production studio and video editing suite.

In addition to teaching courses, the lab has won numerous grants to fund self-generated research and teaching projects. It is building a portfolio of research work and an international reputation. It is part of the SHED network based at the Massachusetts Institute of Technology that includes Labs based at Imperial and UCL in the UK, and at Harvard, Stanford, Yale, and Berkeley in the US.

Access to the Fabrication Lab is controlled, and available only when Lab colleagues are present to supervise. The ethos of the Lab, however, is User-Centred, aimed at empowering students and colleagues to make work for themselves, providing a sophisticated system of teaching and learning so that Lab users can access the necessary equipment and technologies, becoming self-directed, responsible makers.

In addition to maintaining and improving the facilities, Lab colleagues' principal role is to instruct and assist others with their learning, including developing new teaching materials and processes, and to oversee and encourage users' efforts rather than fabricate for them. The Lab frequently operates as an extension of design studios, with users responsible for developing their work in iterative cycles going from studio to Lab. Given the hazardous nature of some processes involved, the Lab differs from the studios, providing closer supervision by Lab colleagues and a level of professionalism analogous to the construction industry. High safety and best practice standards are demanded and maintained at all times.

Given the diverse nature of the facilities and the diverse scope of activities of the Lab, including teaching, research and knowledge exchange, the Lab relies on a multi-disciplinary team, including academic and research as well as technical colleagues, working in conjunction with a large number of trained student Lab Assistants. The Lab requires colleagues with a wide range of skills and a keen interest in working with others from different backgrounds to share knowledge, help support current activities and develop new and innovative uses for the Lab to fulfil its exciting and rapidly expanding potential.

The post-holder is expected to work closely with colleagues within and outside the section to maintain the highest quality of technical support and provide the best possible experience to College users (primarily students and academic and research colleagues) in delivering the College's core activities. The post holder will be expected to adopt a customer-centred approach and commit to personal and professional development, demonstrating this commitment through regular, continuous professional development activities.

The University requires all post holders to understand individual health and safety responsibilities and be aware of the risks in the work environment and their potential impact on both individual work and that of others.

## DIMENSIONS

- The post-holder has no line management or budgetary responsibility but works as part of a multi-disciplinary team of 10 technical, academic and research colleagues and up to 25 trained student Lab Assistants in supporting the core activities of the College.





- The post-holder is a user of the equipment/physical resources in the designated technical service area;
- There may be restrictions on annual leave during busy periods and term time.





# PERSON SPECIFICATION

## QUALIFICATIONS

### Essential

- Graduate educated to degree level in Architecture or a related design degree.

## TRAINING AND EXPERIENCE

### Essential

- Experience in a Fab Lab / Workshop environment
- Specialist knowledge and experience of wood and metalwork for experimental making and prototype manufacturing using machine and hand tools in an analogue workshop.
- Awareness of health and safety legislation, requirements and best practices in a Fabrication Lab environment or similar context.
- Experience working successfully as a member of a customer-facing team of colleagues

### Desirable

- Previous experience in a Higher Education or commercial environment
- Experience in demonstrating equipment to groups
- Knowledge of Rhinoceros 3D, RhinoCAM
- Knowledge of Adobe InDesign, Lightroom, Da Vinci Resolve
- Knowledge of Blender, Twin Motion, Unreal Engine

## APTITUDES, ABILITIES AND PERSONAL ATTRIBUTES

### Essential

- Excellent IT skills, including word processing and spreadsheets.
- Excellent interpersonal skills with the ability to communicate information effectively (either verbally or in written form) and articulate complex issues in a clear and concise manner.
- Excellent planning skills, attention to detail and the ability to meet deadlines and work well under time constraints and other pressures.
- Ability to work both independently and in a team environment
- A customer-focused approach and the ability to demonstrate this approach in personal working practices
- A commitment to continuous personal and professional development
- The flexibility to adapt in an ever-changing sector
- Fully committed to contributing to 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.



# 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 20 August 2024.**

**Interviews will take place on 30 August 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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