

# Postdoctoral Research Associate - Engineering Skills and Behaviour



**Reference: 0081-26**

**Grade: 8**

**Salary: £38,784 to £46,049 per annum, depending on experience**

**Contract Type: Fixed term (36 months)**

**Basis: Full time**

# Job description

## Job Purpose:

The postdoctoral research associate will advance research and development in engineering skills intelligence, leading the creation of an open-access, regionally and nationally relevant labour market intelligence platform that integrates employer demand and educational provision data. This role supports strategic alignment of engineering curricula, workforce development and policy through data analytics, natural language processing, forecasting, and stakeholder engagement. The postholder will contribute to evidence-based reporting and forecasting, deliver analytical outputs for regional and national partners, and engage with external stakeholders—including industry, government, education providers and professional bodies—to influence engineering skills strategy. In doing so, the fellow will align with national initiatives such as the Royal Academy of Engineering Skills Centre's work to identify future technology skills and support teaching and workforce development

## Main Duties/Responsibilities

- ▶ Conduct high-quality research to design, develop and implement methods for integrating and analysing employer job postings and educational curriculum data to identify demand and supply patterns
- ▶ Build and maintain a labour market intelligence platform, ensuring accuracy, accessibility and usability
- ▶ Apply advanced natural language processing, machine learning and skills taxonomy frameworks to extract, map and analyse engineering-specific skills and competencies
- ▶ Produce high quality reports, forecasts and insights on engineering skills trends for industry and policy audiences
- ▶ Engage with regional and national stakeholders to co-produce insights, validate findings and influence strategy and investment in skills
- ▶ Disseminate findings through peer-reviewed publications, workshops, conferences and policy briefs
- ▶ Contribute to project management, reporting and deliverables
- ▶ Mentor and support post-graduate students, where applicable, and contribute to team knowledge-sharing

## Additional responsibilities

- ▶ Engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities.
- ▶ Ensure and promote the personal health, safety and wellbeing of staff and students.
- ▶ Carry out duties in a way which promotes fairness in all matters and which engenders trust.
- ▶ Promote equality of opportunity and support diversity and inclusion as well as working to support the University's environmental sustainability agenda and practices.

## Person specification

|                                     | <b>Essential</b>  | <b>Method of assessment</b>    |
|-------------------------------------|---|--------------------------------|
| <b>Education and qualifications</b> | <p>PhD (or nearing completion) in Engineering, Data Science, Computational Social Science or a related discipline.</p> <p>Strong grounding in research methods relevant to data analytics, NLP and skills.</p>  | Application form and interview |
| <b>Experience</b>                   | <p>Proven experience in quantitative and qualitative research related to engineering skills.</p> <p>Practical experience in natural language processing, machine learning or large-scale data extraction and analysis.</p> <p>Experience in using and developing skills taxonomies integrating multiple data sources.</p> <p>Experience working with academic, industry or policy stakeholders.</p> | Application form and interview |
| <b>Aptitude and skills</b>          | <p>Strong analytical, problem solving and data visualisation skills.</p> <p>Proficiency in programming languages for data processing and NLP.</p> <p>Excellent communication and interpersonal skills.</p> <p>Ability to work independently and within project deadlines.</p> <p>Innovative and proactive.</p>  | Application form and interview |

|                   | Desirable  | Method of assessment           |
|-------------------|--|--------------------------------|
| <b>Experience</b> | <p>Familiarity with national engineering skills agenda and policy communities.</p> <p>Knowledge of policy frameworks related to workforce development, STEM education or regional economic growth.</p> <p>Experience in developing and maintaining online platforms.</p> <p>Experience in producing impactful commissioned reports, responding to tenders and consulting.</p> <p>Experience with data ethics, governance and compliance.</p> | Application form and interview |

## University values

All staff are expected to demonstrate/promote the University's values and expectations, which are an integral part of our strategy and underpin the culture of the University. In addition, our leaders are expected to be accountable, help to execute strategic visions of the University and share and set clear expectations that inspire those around them.

Values + Behaviours



### Innovation

We strive for excellence within ourselves and others, providing solutions to new and existing challenges.



### Collaboration

We work best when we are collaborative, working together to contribute to the Aston community.



### Ambition

We strive together for improvement and innovation looking ahead to see the bigger picture.



### Inclusion

We treat everyone in our community equally and how they would like to be treated.



### Integrity

We are open, honest and fair. We take ownership of the way we work and how we treat each other.

## How to apply

You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23.59 on the advertised closing date.  
All applicants must complete an application form, along with your CV.

Any CV sent direct to the Recruitment Team and Recruiting Manager will not be accepted.

If you require a manual application form, then please contact the Recruitment Team via [recruitment@aston.ac.uk](mailto:recruitment@aston.ac.uk).

## Contact information

### Enquiries about the vacancy:

Name: Claire Lucas  
Job Title: Executive Dean, School of Engineering and Innovation  
Email: [c.lucas@aston.ac.uk](mailto:c.lucas@aston.ac.uk)

### Enquiries about the application process, shortlisting or interviews:

Recruitment Team via [recruitment@aston.ac.uk](mailto:recruitment@aston.ac.uk) or 0121 204 4500.

## Additional information

Visit our website <https://www2 aston.ac.uk/staff-public/hr> for full details of our salary scales and benefits Aston University staff enjoy.

**Salary scales:** <https://www2 aston.ac.uk/staff-public/hr/payroll-and-pensions/salary-scales/index>

**Benefits:** [Benefits and Rewards | Aston University](#)

**Working in Birmingham:** <https://www2 aston.ac.uk/birmingham>

**Employment of Ex-Offenders:** Under the Rehabilitation of Offenders Act 1974, a person with a criminal record is not required to disclose any spent convictions unless the positions they are applying for is listed as an exception under the act.

**Eligibility to work in the UK:** Where an individual is subject to UK immigration control, they will require a visa to work in the UK.

The following individuals do not need a visa for the UK, but do still have to prove their right to work before employment can commence:

- **British Citizens or Irish Nationals**
- **EU/EEA/Swiss nationals with Settled or Pre-settled status under the EU Settlement Scheme**
- **Non-EEA nationals with Indefinite Leave to Remain/Settlement in the UK**

The main routes available for those who need a visa to work in the UK are **Skilled Worker**, **Global Talent** and the **Graduate Route**.

Please see UKVI guidance for further information on eligibility, knowledge of English requirements and approved test centres <https://www.gov.uk/skilled-worker-visa> You can also find further information on our candidate immigration [web page](#).

If you will conduct research in your role, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application. Please see our candidate immigration [web page](#) for further details.

## **Before you start and Right to Work**

### Right to Work Check

All employees must complete a Right to Work check before they commence work at Aston. HR will contact you during the onboarding process to arrange your check.

### Cost of Living - Estate and Letting Agents

There are numerous Estate and Letting Agents that can help you find suitable accommodation. Useful websites for support and guidance

<https://www.gov.uk/government/publications/how-to-rent/how-to-rent-the-checklist-for-renting-in-england> and <https://www.citizensadvice.org.uk/housing/>

You can also use property search websites such as Rightmove or Zoopla.

### **Equal Opportunities**

Aston University promotes equality and diversity in all aspects of its work. We aim to ensure, through our admissions policies for students, and our staff recruitment and selection processes that we encourage applications from all groups represented in the wider community at a local, national and international level.

The University will endeavour not to discriminate unfairly or illegally, directly or indirectly, against student or potential students, staff or potential staff. This commitment applies to all functions of the University and to any stage of an individual's career.

An Equal Opportunities Monitoring Form is included within the application form. Data you provide on the Equal Opportunities Monitoring Form will be included in a general database, for statistical monitoring purposes, enabling the University to monitor the effectiveness of its Policy, Codes of Practice and Guidelines on Equal Opportunities in Employment.

Individuals will not be identified by name.

### **Data Protection**

Your personal data will be processed in compliance with the Data Protection Act 2018 and the General Data Protection Regulation ((EU) 2016/679) ("GDPR"). The University's Data Protection Policy and Privacy Notices, including the Job Applicant Privacy Notice can be found at <https://www2.aston.ac.uk/data-protection>. Your application will only be used to inform the selection process, unless you are successful, in which case it will form the basis of your personal record with the University which will be stored in manual and/or electronic files. Information in statistical form on present and former employees is given to appropriate outside bodies.

Full details of our terms and conditions of service and associated policies and procedures are available online at <https://www2.aston.ac.uk/staff-public/hr/policies>

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