

## Lecturer in Mechatronics and Aerospace Engineering

**OPPORTUNITY**

Where change  
gets real.



**Reference: 0641-26**

**Grade: 8/9**

**Salary: £41,064 to £56,535, per annum, depending on experience**

**Contract Type: Permanent**

**Basis: Full Time**

## Job description

### Job Purpose

Aston University's 2030 strategy focuses on being Inclusive, Entrepreneurial and Transformational. We are reshaping our model of higher education to meet the needs of a rapidly changing world, with the ambition to be a leading university in science, technology and enterprise, measured by the positive impact we deliver for our students, staff, partners and wider community.

The successful candidate will contribute to the research, teaching and scholarly activities of the Department of Mechatronics, Biomedical and Design Engineering within the College of Engineering and Physical Sciences. They will enhance our academic portfolio through professional expertise, collaboration and innovation, and will strengthen external engagement with regional, national and international organisations, including government bodies, industry, professional institutions and educational partners.

Most academic staff undertake a balanced workload across research, teaching and external engagement. While effectiveness is expected in all areas, individual emphases may vary and will be reviewed annually through the Professional Development Review (PDR) process, considering strategic priorities and personal career development.

The College has established strengths across fields including artificial intelligence, bioenergy, biomedical engineering, chemical engineering, chemistry, civil engineering, computer science, construction management, data analytics, design engineering, electrical and electronic engineering, mathematics, mechanical engineering, photonics, product design and supply chain management. This post is central to advancing our capabilities in mechatronics and aerospace engineering, particularly in robotics, avionics and control. The role is supported by an expanding infrastructure, including a Mechatronics Laboratory, Drone Flying Zone, unmanned aerial vehicles (UAVs) and a wind tunnel.

Current departmental research themes include:

- Robotics and autonomous systems
- Sustainable energy and transport
- Smart manufacturing and materials
- Biomedical and healthcare engineering

We particularly welcome applicants with backgrounds in Aerospace, Control, Mechatronics, Electrical/Electronic or Mechanical Engineering, and expertise in areas such as:

- Control engineering of aerospace systems
- Autopilots and fly-by-wire systems
- UAV control, sensing, communication, navigation, tracking and route planning

Growth in teaching activities is also anticipated, especially at master's level and across non-traditional delivery modes. The Department offers a broad range of BEng/MEng programmes, including Aerospace, Biomedical, Design, Electrical and Electronic, and Mechanical Engineering, along with Future Vehicle Technologies (MSc), Mechanical Engineering (MSc), Robotics and Autonomous Systems (MSc), and Smart Manufacturing (MSc).

The Department is a leader in innovative pedagogical practice and plays a key role in the International CDIO initiative, promoting integrated, practice-based engineering education. We seek a candidate with a strong, student-centred teaching approach and the ability to engage learners through interactive classes, industry-informed content, and practical project-based learning.

We require expertise in modelling and controlling the dynamic behaviour of aerospace systems, including relevant laboratory experience. The successful candidate will contribute to the new BEng Aerospace Engineering programme and support the development of hardware-in-the-loop demonstrators.

## Main Duties/Responsibilities

### Research, Innovation and Impact

- ▶ Develop and lead research aligned with the College's strategic priorities.
- ▶ Pursue funded research opportunities, particularly within UKRI, ATI and EPSRC themes such as autonomous aerospace systems, cyber-physical systems, and advanced guidance-navigation-control technologies.
- ▶ Publish high-quality outputs and supervise research students.
- ▶ Build collaborations within and beyond the University, including industry partnerships.
- ▶ *Grade 9:* Demonstrate an international publication record and research-income success.

### Education and Student Experience

- ▶ Teach at foundation, undergraduate and postgraduate levels and participate in all assessment processes.
- ▶ Contribute to curriculum development and innovate in teaching, including digital learning methods.
- ▶ Provide academic guidance and pastoral support to students.
- ▶ Engage in quality assurance and continuous improvement of modules and programmes.
- ▶ *Grade 9:* Lead modules and demonstrate sustained educational innovation.

### Citizenship, Engagement and Services

- ▶ Undertake administrative responsibilities such as programme coordination or admissions.
- ▶ Support University events and outreach activities.
- ▶ Promote Aston's values and contribute to industry engagement, student placements and knowledge-exchange initiatives.
- ▶ *Grade 9:* Chair committees when required and foster industry-funded collaborations.

### Additional responsibilities

- ▶ Maintain continuous professional development.
- ▶ Promote health, safety, equality, diversity and sustainability.

## Person specification

	Essential	Method of assessment
<b>Education and qualifications</b>	<ul style="list-style-type: none"><li>• Undergraduate degree and PhD in Aerospace, Control, Mechatronics, Electrical/Electronic, Mechanical Engineering or related fields.</li></ul>	Application form
<b>Experience</b>	<ul style="list-style-type: none"><li>• Teaching and assessment experience in higher education.</li><li>• Active research profile with outputs appropriate to career stage.</li><li>• <i>Grade 9:</i> Strong international publication record.</li></ul>	Application form and interview



	Essential	Method of assessment
<b>Aptitude and skills</b>	<ul style="list-style-type: none"> <li>• Excellent communication and teamwork.</li> <li>• Ability to develop teaching materials and support students.</li> <li>• Ability to secure research funding and manage projects.</li> <li>• Strong IT skills for research and teaching.</li> <li>• Commitment to professional development and equality, diversity and inclusion.</li> </ul>	Application form and interview

	Desirable	Method of assessment
<b>Education and qualifications</b>	<ul style="list-style-type: none"> <li>• Membership of a relevant professional body.</li> <li>• PGCert/PGCPP</li> <li>• <i>Grade 9: Advance HE Fellowship.</i></li> </ul>	Application form
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Experience in UK higher education and use of VLEs.</li> </ul>	Application form and interview
<b>Aptitude and Skills</b>	<ul style="list-style-type: none"> <li>• Skills in ROS, Java, Python, MATLAB or C++; understanding of digital twins and cybersecurity.</li> </ul>	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**

				
<b>Innovation</b>	<b>Collaboration</b>	<b>Ambition</b>	<b>Inclusion</b>	<b>Integrity</b>
We strive for excellence within ourselves and others, providing solutions to new and existing challenges.	We work best when we are collaborative, working together to contribute to the Aston community.	We strive together for improvement and innovation looking ahead to see the bigger picture.	We treat everyone in our community equally and how they would like to be treated.	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 23.59pm 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: Prof Claire Lucas

Job Title: Dean of School of Engineering and Innovation

Email: [c.lucas@aston.ac.uk](mailto:c.lucas@aston.ac.uk)

Name: Prof Ricardo Sodré

Job Title: Head of Department of Mechatronics and Biomedical Engineering

Email: [j.sodre@aston.ac.uk](mailto:j.sodre@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 applying for is listed 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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