

# JOB DESCRIPTION

**Job Title:** Lecturer/Senior Lecturer in Mechanical Engineering

**Grade:** L/SL

**School/Service:** School of Architecture, Computing and Engineering

**Campus:** Docklands

**Responsible to:** Head of Department (Engineering & Construction)

**Liaison with:** Students, university staff, local employers, other professional and academic organisations, Schools and Colleges

**Never Not Moving Forward**

Build your career, follow your passion, be inspired by our environment of success.

#BeTheChange

The University of East London is one of the most diverse and vibrant universities in the global capital. Our pioneering and forward-thinking vision is making a positive and significant impact to the communities we serve, inspiring both our staff and students to reach their full potential.

Born in 1898 to serve the skills needs of the 2nd industrial revolution, the University of East London has commenced Year 4 of its transformational 10-year Vision 2028 strategic plan led by our Vice-Chancellor & President, Professor Amanda Broderick, to advance Industry 4.0 careers-1st education. We have a clear route-map to provide a springboard for the jobs and opportunities of the future; drive diversity in the 4.0 talent pipeline - working in partnership to promote talent wherever it is found; and to create an inclusive and sustainable, green future.

We are looking for forward-thinking, innovative, curious, high-energy, self-aware people who are passionate about making a positive difference and who will thrive in an inclusive and diverse University community who are never not moving forwards.

As one of the most socially inclusive and international Universities and comprising one of the most diverse staff populations in the UK (50% of our professoriate identify from black or minority ethnic backgrounds), we are hugely proud of our track record in reducing inequalities (ranked 1st in the UK & 2nd globally, Times Higher Education Global Impact Rankings, 2020) and our commitment to equality, diversity and inclusion is at the heart of Vision 2028.

We are building an environment of success where colleagues are supported to achieve, and our community can flourish and thrive. We are an accredited Investors in People Award Institution and have achieved the Investors in People Health and Wellbeing Award. With Athena Swan Awards and being one of a small number of Universities to have achieved the Race Equality Charter Award, we continue on our journey to address and reduce barriers to opportunity.

So, if you are looking to build your career in a dynamic, inclusive and performance-focused team and are inspired by our environment and drive for success, we want you to apply to join the University of East London. We are looking for inspirational individuals who have a passion to make a positive difference to people and planet, creating a more sustainable future for everyone.

# THE DEPARTMENT OF ENGINEERING & CONSTRUCTION (E&C)

The position is based within the Department of Engineering and Construction (E&C). The department delivers over thirty undergraduate, postgraduate, degree apprenticeship and professional doctorate courses including sustainable energy engineering, product design engineering, railway engineering, civil engineering, mechanical engineering, aeronautical engineering, engineering management, biomedical engineering, general engineering, intelligent transport planning engineering, quantity surveying and commercial management, structural engineering, construction management, surveying etc., covering two flagship cluster areas of Engineering (ENG) and Construction, Transportation and Logistics (CTL).

Rising 8 places nationally, UEL Mechanical Engineering records the biggest rise in the overall ranking among London Universities (Complete University Guide 2023). Our mechanical engineering student satisfaction is also among the top quartile (25%) in the UK, ranked 16 of 75. The league table position is reflective of the ongoing investment (capital and human resource) from the University in the mechanical engineering discipline.

The Department also prides itself on excellent student experience, with the civil engineering portfolio recently ranked no. 1 (out of 60) in the UK achieving overall student satisfaction of 96% in the recent NSS survey (July 2020).

Our ambition is to be a global department of stature, producing the leaders, thinkers and paradigm-shifters of tomorrow – and you could help us achieve that goal. That’s because, right now, we’re going through a period of growth that will create a vastly increased student capacity. As a result, we’re looking to recruit a wide range of staff in a variety of roles and are keen to hear from innovative, high-energy people with a real desire to help make a positive difference and thrive within our unique School community.

In the recent UK-wide assessment of university research, conducted through the latest Research Excellence Framework (REF), for Engineering @ UEL, there was a 92% increase in the FTE submitted and more than three quarters of the outputs and half of the impact was considered a world-leading or internationally excellent.

# JOB PURPOSE

This new lectureship post has become available within the subject area of mechanical engineering.

As an expert in this field, you will deliver lectures, workshops, seminars, tutorials, and practical sessions including site visits and field schemes. In addition to preparing teaching materials to conduct assessments in accordance with UEL’s quality standards, you will contribute to the School’s vibrant research and/or knowledge transfer activities which include obtaining research grants and funding.

# MAIN DUTIES AND RESPONSIBILITIES

* To teach and assess students at all levels.
* To exercise a high standard of output-oriented applied research both personally and as a member of a team.
* To supervise UG and PG level student research projects.
* To contribute to the development, design, delivery and leadership of modules at various levels, including assessment methods, ensuring that the learning materials and methods of delivery meet defined learning objectives.
* To support the Head of Department to ensure the effective day-to-day operation of the allocated academic area.
* To undertake operational and administrative responsibilities as allocated (e.g. module leader); making an important contribution to the accreditation of courses and quality control processes; playing a key role in validations, liaising with accreditation bodies as necessary.
* Working with colleagues to ensure efficient and effective running of programmes and modules and the achievement of Department and University deadlines.
* To support curriculum development and new course development.
* To take on responsibilities (leading small projects where appropriate) in relation to University led and/or Department strategic initiatives including areas such as commercial income generation activity; student recruitment and retention; partnership development; development of flexible and work-based learning provision; development of widening participation activities.
* To participate with other staff in the development of teaching, learning and assessment strategies.
* To play a role in representing both the course(s) and the School in student recruitment and retention activities including participation in Clearing activities during the summer period and in Open Days throughout the year.
* To assist with the pastoral care of students as Academic Advisor.
* To undertake staff development as needs are identified by the individual and/or line manager.
* To enhance the quality of teaching provision and programme development, drawing on leading practices from the HE and other sectors, and building e-learning into the delivery of teaching to students as appropriate, including electronic formative and summative assessment.
* To maintain and develop areas of expertise in appropriate ways under the general guidance and oversight of the appropriate academic manager, contributing to the discipline area’s activities and reputation both internally and externally.
* To participate in University activities as required through membership of committees, working groups etc., as required.
* To be involved in research-informed teaching projects as required.
* To be involved in the School’s and the wider University quality assurance systems and processes.
* To engage as link tutor on the Overseas Collaboration and partnership portfolio if required.
* To contribute to the attainment and direction of the School’s strategic plans, their development and execution.
* To undertake any other duties and responsibilities as may reasonably be required from time to time by the head of the department.

**PERSON SPECIFICATION**

**EDUCATION QUALIFICATIONS AND ACHIEVEMENTS**

**Essential criteria:**

* Honours or Masters degree within the area of engineering for a closely related discipline. (A/C)
* A PhD (or within 6 months’ of completion) or proven research track record (including high-quality refereed publications in high-impact journals) within the area of engineering or a closely related discipline. (A/C/I/R)

**Desirable criteria:**

* A Certificate in Teaching and Learning in Higher Education. (A/C/I)
* Fellowship of the Higher Education Academy. (A/I)
* Chartered or near chartered membership of an appropriate professional body e.g. IMechE, IET, ICE etc. (A/C/I)

**KNOWLEDGE AND EXPERIENCE**

**Essential criteria:**

* In-depth knowledge and specialist knowledge in one or more sub-areas:mechanics of materials, thermal and fluid dynamics, energy science, engineering dynamics and control at an advanced level. (A/I/R/P)
* Experience of conducting practical and/ or laboratory sessions in at least one of these subject areas, mentioned above. (A/I/R/P)

**Desirable criteria:**

* Experience with research project funding and ability to lead a team and supervise research students. (A/I)
* Experience of teaching in Higher Education. (A/I)
* Experience of innovating on best practices for learning, teaching, support and assessment methods. (A/I)

**SKILLS AND ABILITIES**

**Essential criteria:**

* An ability to teach at Undergraduate, Postgraduate and research degree level and to undertake module administration and personal tutorship. (A/I)

**Desirable criteria:**

* Experience in design and development of a programme of study in Higher Education, and to develop creative teaching methods. (A/I)
* Evidence of knowledge transfer activity and collaborations with industry. (A/I)

**TEACHING AND LEARNING SUPPORT**

**Essential criteria:**

* A strong commitment to widening participation and a deep understanding, based on solid experience, of how to bring out the best in students from diverse backgrounds, including those who may have underperformed in the past. (A/I)
* An inspirational teacher who collaborates well with colleagues and students in order to achieve the best possible outcomes for students. (A/I/P)
* A strong commitment to high-quality, reflective and collaborative professional practice in teaching and learning in higher education. (A/I)

**PERSONAL ATTRIBUTES AND QUALITIES**

**Essential criteria:**

* Commitment to the promotion and advancement of the University. (A/I)
* An ability to work as part of a team. (A/I)
* An ability to develop professional relationships with external agencies. (A/I)

# OTHER ESSENTIAL CRITERIA:

* Commitment to and understanding of equal opportunities issues within a diverse and multicultural environment. (I)

**Criteria tested by key:**

A - Application form

I - Interview

C - Certification

R - Research Papers

T - Test

P - Presentation