

Teaching Associate/Assistant in Engineering Design

Department	Department of Design, Manufacturing and Engineering Management (www.strath.ac.uk/engineering/designmanufactureengineeringmanagement/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Teaching	Reference No	517174
Reports To	Head of Department, also via Director of Teaching & Learning	Grade:	Associate Grade 7 / Assistant Grade 6, depending on experience
Salary Range:	Associate Grade 7 £35,308 - £43,155 Assistant Grade 6 £30,619 - £34,314	Contract Type:	Fixed Term (24 months)
FTE	1 (35 hours/week)	Closing Date	17/04/2023

Job Advert

The Department of Design, Manufacturing and Engineering Management (DMEM), Faculty of Engineering, University of Strathclyde, wishes to appoint a highly motivated individual to new and exciting roles of Teaching Associates/Assistant Engineering Design with research. The position in Engineering Design is for 2 years and includes teaching as well as research and administrative support duties for the Head of Department. Whether Teaching Associate (Grade 7) or Teaching Assistant (Grade 6) will depend on experience. Due to the nature of the post with teaching as well as research and administrative activities, this position can be seen as a postdoctoral role with teaching responsibilities that can lead to further academic or teaching roles. The position is envisaged to start in July 2023 or as soon as possible thereafter.

You will be fluent in engineering design. This includes, but not limited to, engineering design methods and processes, digital design, computational engineering design, mechanics, mechatronic design, mechanical component and system design, design for manufacturing processes, and systems engineering.

In these roles, you will deliver teaching, teaching support and other activities to ensure that a world-class student experience is enabled for undergraduate and taught postgraduate students, through the delivery of lectures, other classes, workshops, tutorials and project supervision. You will also be expected to undertake scholarly and research activities aligned with teaching activities. You will be an ambassador of our Department, the Faculty of Engineering, and Strathclyde, and be responsible for developing our Department's reputation in its teaching activities both internal and external to our University.

You will work as part of a team specifically focused on developing our students' core professional engineering skills of design, experimentation, engineering management and the ability to apply fundamental engineering principles to real-world engineering problems. The role requires delivery of a variety of types of teaching within the core modules of our established portfolio of integrated engineering programmes. The key focus of the role is delivering the very best student experience and giving our graduates industrially-relevant engineering skills. You will be expected to teach both on-campus and online using the full range of university digital systems and tools.

The Department of Design, Manufacturing and Engineering Management (DMEM) provides a unique offering combining end-to-end multidisciplinary expertise from creative design, through to engineering design, manufacturing and engineering management of the entire system. DMEM also houses the UK's Advanced Forming Research Centre (AFRC), which is located off-campus at a dedicated site just outside Glasgow and is part of the UK's High Value Manufacturing Catapult and the National Manufacturing Institute Scotland (NMIS). We operate substantial and well-established collaborations with academic and industrial partners throughout the world. With more than 150 staff and more than 80 Postgraduate Research (PGR) students both PhD and EngD, and more than 650 students from over 30 nations, we are a vibrant, international community.

The Department currently utilises its own teaching and workshop facilities along with those provided by other Departments in the Faculty of Engineering and the University as a whole. DMEM students have access to a wide variety of design and (additive) manufacturing equipment in our multiple workshops and labs, e.g. the DMEM's Digital Design and Manufacturing Studio (DDMS). Across the street and green space from the James Weir building where our Department's facilities are housed, the University has most recently opened a £60 million state of the art Learning & Teaching hub, aimed at furthering our research and technology programmes. We emphasise through-life learning and offer multiple programmes, including Graduate Apprenticeships, Undergraduate, Postgraduate Taught, Distance Learning, Continuous Professional Development, and executive programmes comprised of modules across the themes of Design, Manufacturing and Engineering Management. We are the only Department in the UK with its UG programmes accredited by three professional institutions: the Institution of Engineering Designers (IED), the Institution of Engineering and Technology (IET), and the Institution of Mechanical Engineers (IMechE). For details on the programmes, see 'Study with Us' at <http://www.dmem.strath.ac.uk>.

As part of the University of Strathclyde, our vision is to be bold and ground breaking, placing us amongst the world's leading international technological universities. We are vibrant, dynamic and passionate about solving the challenges facing society and industry through our cutting-edge, multi-disciplinary research, education and knowledge-exchange with global partners.

The Department has a strong international reputation for teaching and research, and is one of the premier departments in the UK. Our strong partnerships with industry, national and international academic partner institutions, and a variety of global research agencies, and governmental agencies ensure the industrial applicability of our courses and our research outputs, and enable us to provide our students with state-of-the-art teaching and learning facilities.

We are looking for you who thrives to promote engineering innovation with and for engineering leaders of the future.

In summary, the successful candidates will be required to undertake the independent development and delivery of classroom-based and online/blended learning teaching materials. You will have the pedagogical skills necessary to develop quality learning materials and assessment methods for classroom-based, online and distance learning programmes and the ability to ensure an enthusiastic and engaged audience. You will also be expected to centrally evolve and improve content and delivery methods, including suggesting the use of, researching and embracing new technologies and practices. You will have excellent time and project management capability, excellent communication and teamwork skills, and an ability to engage with a wide range of individuals. To be considered for this role you will be educated to degree level in a relevant engineering discipline, and previous experience in the delivery of (independent) teaching, student support, and project supervision. You will have sound engineering design and/or engineering management knowledge in topics as mentioned above, and proven ability to collaborate well with colleagues and industry.

Job Description

Brief Outline of Job:

To teach and project supervise. To create, develop, deliver and assess a range of teaching materials, including online and blended-learning, and contribute to the planning, design and development of new teaching materials and programmes in engineering design and/or engineering management, across undergraduate, post-graduate taught and continuous development programme levels.

Main Activities/Responsibilities:

1.	As part of a teaching team, delivery of class teaching, including lecture in classes and project supervise undergraduate (UG) and post graduate taught (PGT) students. This may also include continuous development programme (CPD)/focussed courses for industry.
2	Conceptualisation and development of teaching materials across a range of modules with a focus on engineering design, using appropriate teaching, learning and assessment methods.
3	Design and development of online teaching materials and experience of use of online delivery platform.
4.	Undertake student assessment and examination activities including setting, marking and assessing work and examinations and providing appropriate feedback to students. Supervision of undergraduate and postgraduate students, including provision of pastoral care.
5.	Work with teaching and academic colleagues to ensure student needs and expectations are met, introducing improvements as required.
6.	Critically evaluate and extend pedagogical and delivery practices, applying this to enhance and transform the student experience.

7.	Identify areas where current provision (and/or methods of delivery) is in need of revision and contribute to the planning, design and development of new materials and courses for undergraduate and postgraduate taught programmes.
8.	Contribute to teaching as part of articulation agreements with institutions in the US and Europe and other overseas partners and provision of pastoral care and support for articulation students.
9.	Contribute to student recruitment and co-ordinate student placements. Support the marketing and recruitment activities associated with growth of student numbers and partner organisations (including overseas).
10.	Plan and manage own workload including teaching and administration activities.
11.	Participate in Departmental activities and events (e.g. Teaching and Learning team meetings, graduations, Department meetings)
12.	Contribute to Departmental citizenship tasks such as Year Advisor roles, as agreed with Head of Department
13.	Perform research support activities, such as literature reviews, research grant application development, presentation preparation, as agreed with Head of Department

Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 Good honours degree and PhD in appropriate discipline.

D1 Member of relevant Chartered/professional bodies (including Higher Education Academy).

Experience

E2 Experience of delivering teaching programmes at undergraduate and postgraduate level.

E3 Experience of developing module materials for class-room based and online/blended programmes.

E4 Experience of supervising students, both undergraduate and postgraduate.

E5 Experience in engineering design and/or engineering management.

D2 Experience of working in industry.

E6 Experience of engaging students in practical research and outreach activities/projects.

Job Related Skills and Achievements

E7 Ability to plan and manage own workload to ensure the development, delivery and assessment of taught programmes.

E8 Developing knowledge of teaching and student assessment methods

E9 Ability to work within a team environment

E10 Experience of relevant scholarship and/or research activities.

E11 Experience of knowledge exchange related activities.

Personal Attributes

E12 Excellent interpersonal and communication skills, with the ability to listen, engage and persuade, and to present complex information in an accessible way to a range of audiences.

E13 Be genuinely interested in education and people, in developing engineering leaders of the future and thereby impacting societal futures.

Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

Informal enquiries about the post can be directed to Professor and Head of Department Anja Maier at anja.maier@strath.ac.uk or DMEM Director of Teaching & Learning Dr Hilary Grierson h.j.grierson@strath.ac.uk

Conditions of Employment

Conditions of employment relating to the Teaching staff category can be found at: [Conditions of Employment](#).

Rewards and Benefits

Our staff have access to a wide range of outstanding benefits that include financial rewards, family friendly and wellbeing benefits and career development opportunities, details of which can be found [here](#).

Probation

Where applicable, the successful applicant will be required to serve a 9 month probationary period.

Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from [Payroll and Pensions](#).

Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the Relocation Policy.

Interviews

Formal interviews for this post will be held during May 2023 or as soon as possible thereafter.

Equality and Diversity

We value diversity and welcome applications from all sections of the community.

The University currently holds a Bronze Athena SWAN award, recognising our commitment to advancing women's careers in science, technology, engineering, maths and medicine (STEMM) employment in academia.

University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. [Our Values](#) have been derived from how we act and how we expect to be treated as part of Strathclyde.

