

JOB DESCRIPTION

Job Title: Associate Professor/ Professor in Digital Engineering
(Infrastructure and Built Environment)

Grade: AC4/AC5

Department: Engineering

Responsible to: Head of School

Key Contacts: Other Members of School staff as required. School and Faculty leadership & management teams and other senior staff in the School of Engineering and the Faculty of Engineering and Science.

Standard Occupational Classification (SoC code):

Non-Contractual Nature of Role Profile: This role profile is non-contractual and provided for guidance. It will be updated and amended from time to time in accordance with the changing needs of the University and the requirements of the job.

PURPOSE OF ROLE:

To provide strategic academic and research leadership in Digital Engineering for Infrastructure and Built Environment, contributing to the development of internationally recognised research, innovation, enterprise and research-informed education within the School of Engineering.

The successful candidate will play a leading role in shaping the School's research strategy and developing internationally recognised capability in areas such as digital infrastructure, smart cities, digital twins, BIM, sustainable built environment technologies, intelligent infrastructure systems, data-driven engineering and applied AI within the built environment sector.

The post holder will be expected to demonstrate the vision, credibility and leadership capability to inspire and lead high-performing research groups, centres and interdisciplinary collaborations, secure significant external research and innovation funding, supervise doctoral researchers and develop strategic partnerships with industry, government and international collaborators.

The role will contribute strategically to the University's ambitions in REF, KEF, doctoral supervision, innovation, industrial engagement and international research collaboration.

Depending on experience and expertise, there may be opportunities for the successful candidate to undertake wider academic leadership and

management responsibilities within the School, including positions such as Deputy Head of School, Associate Head of School or Director of Research.

KEY ACCOUNTABILITIES

Team Specific:

- Significant contribution to the University's national and international profile in teaching and the student experience.
- Lead in the development and enhancement of curricula, policy or initiatives in teaching, learning and the student experience at the leading edge of practice.
- Lead in the development of national or international teaching or subject-related initiatives which impact staff and students.
- Lead in the acquisition and management of resources to support teaching, student experience or subject-related work.
- Champion and promote research-informed learning and teaching.
- Lead or contribute significantly to the sustained development of others (e.g. mentoring, staff development, training) in relation to education, the student experience or personal subject expertise Lead at Faculty or University level on the development and implementation of strategy, policy and plans in relation to education, the student experience, or subject area.
- learning and teaching and/or student experience strategies at Faculty and University level.
- Lead or contribute significantly to major national and international initiatives that lead to relevant outputs e.g. teaching materials, textbooks, peer-reviewed research publications.
- Lead in the development of teaching excellence across the institution.

School Specific:

The person appointed will be expected to:

- Provide strategic leadership in research, innovation and research-informed education within the field of Digital Engineering for Infrastructure and Built Environment.
- Contribute selectively to high-quality teaching, postgraduate supervision and curriculum innovation aligned to the School's strategic priorities.
- Lead and develop interdisciplinary collaborations across the School, Faculty and external partners to strengthen research excellence and industrial engagement.
- Support the development of externally funded research and innovation activity, including collaboration with UKRI, Innovate UK, Horizon Europe, industrial and civic partners.
- Contribute to the enhancement of postgraduate research supervision, doctoral training and early career researcher development.

- Promote collaboration, partnership activity and international engagement to enhance the School's research profile and reputation.

Generic:

- Lead and develop internationally recognised research activity in Digital Engineering for Infrastructure and Built Environment.
- Develop and inspire research groups, centres and interdisciplinary collaborations aligned to the School's strategic priorities.
- Secure substantial external research and innovation funding from UKRI, Innovate UK, Horizon Europe, industry and other strategic funding bodies.
- Lead REF-quality research outputs, impact case studies and research environment development.
- Supervise and mentor doctoral researchers and early career academics.
- Develop strategic partnerships with industry, government, local authorities and international collaborators.
- Contribute strategically to institutional ambitions relating to REF, KEF, innovation and industrial engagement.
- Provide academic leadership that supports the School's long-term research growth and international reputation.

Managing Self:

- Develop expertise inquiry/research-informed teaching with an increasing degree of autonomy.
- Keep abreast of developments within the field and seek continuous improvement of own professional practice.
- Actively participate in established professional development framework activities.
- Behave in a manner which reflects the University values and creates a positive environment for work and study.
- Maintain a high standard of student engagement and satisfaction.
- Seek to maximise the learning outcomes of students.

Core Requirements:

- Adhere to the University's policies on Equality, Diversity and Inclusion and Information Security.
- Ensure compliance with Health & Safety, Data Protection and Equality Legislation.
- Adhere to the university's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, reflecting the shared responsibility of minimising the university's negative environmental impacts wherever possible.

- Adhere to current legal requirements and best practice relating to digital content and accessibility, including Web Content Accessibility Guidelines when creating digital content.

Additional Requirements:

Undertake any other duties as requested by the line manager or appropriate senior manager, commensurate with the grade (Any other duties commensurate with the post and grade as agreed with the Head of Department or PVC of the Faculty).

This is a professional, demanding role within a complex organisation with an ambitious strategic plan and agenda for change. The role holder will be expected to show flexibility in working arrangements, including working hours, to ensure that the School of Engineering delivers the required level of service.

Freedom of speech and academic freedom:

In any matter falling under this job description, the university will have particular regard to, and place significant weight on, the importance of freedom of speech within the law, academic freedom and tolerance for controversial views in an educational context or environment. The University's commitments to freedom of speech and academic freedom are set out in the [Freedom of Speech Code of Practice](#). In the event of any conflict between this job description and the Freedom of Speech Code of Practice, the Freedom of Speech Code of Practice will take precedence.

KEY PERFORMANCE INDICATORS:

Performance Indicators will be established in consultation with the Head of Department and PVC as part of the post holder's annual Appraisal and Professional Development Review and with due regard to the University's KPIs.

KEY RELATIONSHIPS (Internal & External):

- Senior managers and their schools, research groups, administrative and technical/support staff
- Directorates of the University
- Other Faculties of the University
- Partner Colleges
- Local, national, and international collaboration partners

PERSON SPECIFICATION

EXPERIENCE:

Essential Criteria

- Delivery and/or leading at undergraduate and/or postgraduate level in the field of Digital Engineering for Infrastructure and Built Environment.
- Extensive knowledge of key policy issues at institutional, national and sector-wide level.
- Internationally recognised research profile in Digital Engineering, Smart Infrastructure, BIM, Digital Twins, Applied AI, Intelligent Infrastructure Systems or related areas.
- Proven track record of leading research groups, centres or major collaborative research initiatives.
- Strong track record of securing significant external research and innovation funding.
- Evidence of successful doctoral supervision and research capacity building.
- Strong portfolio of internationally recognised research outputs and impact.
- Experience of contributing to or leading REF-related activity.
- Experience of developing strategic industrial and international research partnerships.
- Demonstrable strategic academic leadership experience within higher education or research-intensive environments.

Desirable Criteria

- Management of Teaching and research projects.

SKILLS:

Essential Criteria

- Outstanding knowledge of the mechanisms for Higher Education funding.
- Well-developed organisational and management skills.
- Able to develop and implement staff training.
- Well-developed interpersonal skills and ability to motivate others.
- Excellent written and oral communication skills.
- Commitment to the promotion of high standards and excellence • Ability to think strategically and conceptually.
- Capacity to listen and consult, good negotiation skills.
- Capacity to make informed decisions.
- Ability to work effectively and deliver under pressure.
- Able to use IT effectively.

- Well-developed project management skills.

Desirable Criteria

- N/A

QUALIFICATIONS:**Essential Criteria**

- PhD degree in a relevant subject.
- Postgraduate teaching qualification.
- Minimum of Associate Fellow of HEA or significant teaching experience.

Desirable Criteria

- Introduction to Project Management.

PERSONAL ATTRIBUTES:**Essential Criteria**

- We are looking for people who can help us deliver the [values](#) of the University of Greenwich: Inclusive, Collaborative and Impactful.

Desirable Criteria

- N/A