

JOB DESCRIPTION

Job Title: Lecturer (L) in Web Technologies (Databases) or (Big Data)

Grade: AC2

School: School of Computing and Mathematical Sciences

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 Computing and Mathematical Sciences and the Faculty of Engineering and Science

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 conduct high-quality teaching and research on undergraduate and postgraduate programmes in **Web Technologies, Databases, and Big Data**. The role will focus on delivering high-quality education in a variety of formats, engaging in research and enterprise activities, and ensuring that modules adhere to accreditation standards set by professional bodies such as the **British Computing Society (BCS)**.

The role will focus on delivering high quality education in a variety of formats as well as research and enterprise activities. The person appointed will be expected to:

- Contribute to the delivery of existing teaching, course development, and to participate in the research carried out in the School.
- Contribute more widely to the design and delivery of teaching activities appropriate for the needs of a diverse student body; across the range of courses offered by the School.
- Engage in research and professional practice across the subject area and contribute to the research profile of the School and to the University's REF submission and at least one of the Faculty's research groups.

KEY ACCOUNTABILITIES

Team Specific:

- Contribute to the delivery of high quality, innovative and effective teaching and new teaching initiatives, including inclusive approaches to setting and marking assessment.
- Lead on personal and academic tutoring of undergraduate and postgraduate students.
- Lead and support others in the design and develop of new courses/modules demonstrating excellent curriculum design.
- Contribute to curriculum development within the School.
- Contribute to subject, professional and/or pedagogical research leading to the publication and/or dissemination of original work.
- Contribute to the research profile of the academic unit and to the REF submission of a Faculty research group.
- To contribute to the development of funding bids which contribute to the acquisition of internal and external resources to fund research, enterprise or teaching projects.
- Contribution to the continuous improvement of the student experience and Lead courses/modules effectively including adopting a responsive approach to students.
- Effective cross working with Professional Services to support students.
- Contribute to relationship management and engagement with key external bodies for teaching at a regional and national level; the national or regional public/cultural sectors/business and industry/professional bodies in relation to teaching, research or enterprise.
- Maintain effective, high quality and productive working relationships with professional bodies and employers.
- Supervision of undergraduate and postgraduate students.
- Work with other academics and the administrative teams to deliver excellent student care and support student success and employability.
- Contribute to the general academic administrative work of the School and Faculty.

School Specific:

The person appointed will be expected to:

- Demonstrate flexibility by delivering high quality teaching, research and enterprise activities in a range of formats, across all disciplines and at all academic levels in the School.
- Deliver effective teaching and learning provision suitably focussed for a wide range of student demographics and cohort sizes (typically 20 – 300+ students at a time). This provision will include lectures, practicals, tutorials, seminars/workshops or other teaching, research or outreach events as may be required.
- Display resilience and adaptability to changing circumstances by the active support of a range of initiatives to promote collaboration, outreach and partnership activities across the School.

Generic:

- Assist the School in achieving its KPIs.
- Contribute to School plans, activities and efficient working practices.
- Participate in visit to schools, local community groups, public engagements and related activity.
- Demonstrate a commitment to equality, diversity and inclusion through teaching practice and/or engagement with university initiatives.
- Contribute to peer review and School based teaching development activities.
- Promote your work and represent your discipline and the work of the University internally and externally, and take a proactive approach to ethical, good practice.

Managing Self:

- Develop expertise in 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 and promote the University's policies on Equality, Diversity and Inclusion and Information Security.
- Ensure compliance with Health & Safety and Data Protection Legislation.
- Support and promote the university's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, recognising 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 PVC of the Faculty, the Head of School, line manager or appropriate senior manager, commensurate with the post and grade.

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 Computing and Mathematical Sciences delivers the required level of service.

KEY PERFORMANCE INDICATORS:

Performance Indicators will be established in consultation with the Head of School as part of the post-holder's annual Appraisal and Professional Development Review.

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 Web Technologies, Databases, or Big Data and related areas that support these subjects.
- Industry experience or applied research experience in web development, databases, or big data analytics.
- Conducting high quality, innovative and effective teaching on postgraduate and undergraduate programmes.
- Leading courses/modules effectively including adopting a responsive approach to students.
- Leading and contributing to subject, professional and/or pedagogical research and other scholarly activities in the School.
- Student care and pastoral provision.

Desirable Criteria

- Postgraduate teaching /supervision.
- Creating professional/community partnerships.
- Ability to teach across disciplines.
- Leading on external accreditation activity.

- Designing and leading significant teaching and assessment activity.
- Ability to integrate cloud computing, AI-driven data analytics, or cybersecurity aspects into teaching.
- High quality publications.
- Initiating the development of Research bids.

SKILLS:

Essential Criteria

- Strong technical expertise in SQL, NoSQL, cloud databases, and big data frameworks (e.g., Hadoop, Spark, AWS, Google Cloud, or Azure).
- Proficiency in web development technologies (e.g., JavaScript, React, Node.js, or Python-based frameworks).
- Ability to engage with and respond to student feedback.
- Outstanding organisational, IT communication and interpersonal skills.

Desirable Criteria

- Knowledge of blockchain, data security, or advanced data visualisation techniques, etc.
- Experience with enterprise-scale database management.
- Some experience in AI-driven data analytics.
- Individual and /or collaborative income generation.
- Application for research funding and other bids.

QUALIFICATIONS:

Essential Criteria

- PhD in Computer Science, Web Technologies, Databases, Big Data, or a related fields
- OR substantial industry experience with an appropriate professional qualification.

Desirable Criteria

- Teaching qualification (e.g., PGCert in Higher Education, Fellowship of HEA).

PERSONAL ATTRIBUTES:

Essential Criteria

- Commitment to the University's values: Inclusive, Collaborative, and Impactful.
- Ability to work independently and as part of a team.
- Enthusiasm for engaging with students and improving the learning experience.

Desirable Criteria

- N/A