
University of Sunderland

Role Profile

Part 1

lifechanging



**University of
Sunderland**

Lecturer Engineering Digital Technologies

Job Title:	Lecturer Engineering Digital Technologies
Reference No:	
Reports to:	Team Leader, School of Engineering
Responsible For:	
Grade:	Grade E
Working Hours:	37 hours per week for nominal purposes
Faculty/Service:	Faculty of Technology
Location:	Sunderland Campus
Main Purpose of Role:	To provide high quality teaching in engineering to undergraduate and post graduate students, be active in research and reach out activities, and contribute to the administration of modules and programmes related to the engineering disciplines.
Key Responsibilities and Accountabilities:	<p>Faculty Specific:</p> <ul style="list-style-type: none">• To contribute to the teaching and curriculum development of designated modules in digital technologies across undergraduate and post graduate programmes• To be actively engaged in research in engineering• To undertake duties in relation to the assessment of student academic work, student placements and student research• To undertake academic leadership of engineering modules and programmes as required by the Engineering Team Leader• To develop subject knowledge of undergraduate and postgraduate students• To undertake pastoral and academic support of students• To undertake tasks as required by the Head of School• To be involved in reach out activities related to engineering• To be involved in supporting off campus activities of the University, as appropriate
Special Circumstances:	<p>Achievement of HEA Fellowship:</p> <p>Lecturers without Higher Education Academy Fellowship status will be expected to achieve Fellowship within two years of commencing their role.</p>

Part 1 B:

Generic to all Lecturer roles:

Individuals carry out a range of duties and have responsibility taken from the following. Whilst it is not anticipated that all of the activities listed below will be covered by one individual, it is expected that over time all individuals will make a balanced contribution to the three areas of academic activity (research, teaching and learning and reach-out).

Academic Practice

- Agree and manage own teaching, research, reach-out and academic management/administration responsibilities, with guidance from a mentor if required.
- Teach as a member of a teaching team in a developing capacity within an established programme of study.
- Teach in a developing capacity in a variety of settings from small group tutorials to large lectures.
- Transfer knowledge in the form of practical skills, methods and techniques.
- Identify learning needs of students and define appropriate learning objectives.
- Ensure that content, methods of delivery and learning materials will meet the defined learning objectives.
- Develop own teaching materials, methods and approaches with guidance.
- Develop the skills of applying appropriate approaches to teaching, challenge thinking, foster debate and develop the ability of students to engage in critical discourse and rational thinking.
- Supervise the work of students, provide advice on study skills and help them with learning problems.
- Select appropriate assessment instruments and criteria, assess the work and progress of students by reference to the criteria and provide constructive feedback to students.
- Seek ways of improving performance by reflecting on teaching design and delivery and obtaining and analysing feedback, including peer review of teaching.-
- Develop and implement personal research and reach-out plans.
- Conduct individual and/or collaborative research and reach-out projects.
- Contribute to writing proposals for external funding for research and/or reach-out activities and contribute to the subsequent delivery of projects that are funded.
- Disseminate the outcomes of research and/or reach-out through publication, presentation or exhibition.
- Continually update knowledge and understanding at the forefront of the academic discipline and, if appropriate, also at the forefront of the relevant area of professional practice.
- Translate knowledge of advances in the subject area or professional practice into the course of study.

Communication

- Communicate complex ideas and information clearly and effectively (orally, in writing and electronically) and encourage in others commitment to learn.

Liaison and Networking

- Liaise with colleagues/students and participate in internal networks.
- Join external subject/research networks to share information and ideas.

Managing People

- May supervise post-graduate students or researchers or other grant-funded staff.

Teamwork

- Collaborate with academic colleagues as appropriate.
- Attend and contribute to subject group and team meetings.

- Contribute to effective management of the Academic Area by performing duties outside of immediate academic practice, as agreed with the staff team leader or Associate Dean.

Pastoral Care

- Use listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and provide support.
- Appreciate the needs of individual students and their circumstances.
- Act as personal tutor, giving first line support.
- Refer students as appropriate to services providing further help.

Initiative, Problem Solving and Decision Making

- Develop initiative, creativity and judgment in teaching and learning, research and reach-out activities.
- Respond to pedagogical and practical challenges.
- Contribute to collaborative decision making with colleagues.
- Comply with the University's expectation of an individual member of academic staff in relation to their own self-monitoring, continuing professional development and self-regulation.

Planning and Managing Resources

- Use teaching and research resources, laboratories and workshops as appropriate.
- Act as module leader and manage personal administrative tasks including contributing to the planning of delivery of taught programmes, research student programmes, research projects and other projects as relevant so as to contribute to quality enhancement in all areas of academic activity.

Sensory, Physical and Emotional Demands

- Sensory and physical demands will vary from relatively light to a high level depending on the discipline and the type of work and will involve carrying out tasks that require the learning of certain skills.
- Balance, with help, the competing pressures of teaching, research, reach-out, academic management/administrative demands and deadlines.

Work Environment

- Is required to be aware of the risks in the work environment and their potential impact on their own work and that of others.
- Adhere to academic governance, equality and diversity, relevant health and safety and risk management requirements.



Part 2A: Essential and Desirable Criteria

These criteria are assessed at the short listing stage.

The essential criteria must be met in order to be eligible for interview.

Essential

Qualifications and Professional Memberships:

- Honours degree in Electrical or Mechanical engineering or equivalent

Experience:

- Industrial experience and / or proven track record of applied research in at least one of the following:
- Industry 4
- Industrial Internet of Things
- Digital Systems for Manufacturing (Smart Factory Technology)
- Manipulation and visualisation of complex data (Big Data)

Key Knowledge and Expertise:

- Experience of teaching or industrial training of relevant subject material and at an appropriate level
- Engage in continuous professional development
- Ability to work under own initiative but also as part of teaching team
- Desire to promote the development of others and a willingness to contribute positively to the student experience

Desirable

Qualifications and Professional Memberships:

- A post graduate degree in a relevant subject area, or relevant professional experience.
- Higher Education teaching qualification (e.g. PG Cert)
- Higher Education Academic Fellowship Status
- Membership with a relevant professional body or the ability to achieve this

Experience:

- Skilled in working with groups and providing a safe and supportive learning environment which promotes personal growth and development
- Experience in engineering research, or evidence of the capacity to be research active

	<p>Key Knowledge and Expertise:</p> <ul style="list-style-type: none"> • Experience of digital systems preferably within a manufacturing industry • Knowledge of and ability to be adaptable to teach and engage with subject matter of the wider engineering domain
Special Circumstances:	<p>Achievement of HEA Fellowship</p> <p>Lecturers without Higher Education Academy Fellowship status will be expected to achieve Fellowship within two years of commencing their role.</p> <p>Academic staff progression from Lecturer to Senior Lecturer:</p> <p>There is also an expectation that staff appointed to the Lecturer Role Profile will have the opportunity to develop the role and take on the duties and responsibilities of the Senior Lecturer role. The process for progression from the Lecturer to Senior Lecturer role is outlined in the Academic Staff Progression guidelines document.</p>

Part 2B: Key Competencies

Competencies are assessed at the interview/selection testing stage	<p>Key Knowledge and Expertise (generic):</p> <ul style="list-style-type: none"> • Possess sufficient breadth or depth of specialist knowledge in the discipline to work within established teaching, research and reach-out programmes. • Engage in continuous professional development. • Possess the qualities and transferable skills necessary for the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.
	<p>Analysis and Research:</p> <ul style="list-style-type: none"> • Gathers data rigorously and conducts robust analysis, questioning assumptions and existing knowledge. • Develops hypotheses and concepts to explain data, events and phenomena. • Reports findings to wider community and is able to withstand challenge by relying on evidence gathered and processes used for analysis.
	<p>Communication:</p> <p>Oral</p> <ul style="list-style-type: none"> • Summarises and interprets complex, conceptual and special matters to aid others' understanding and aimed at their needs. • Uses appropriate styles and arguments to influence and negotiate satisfactory outcomes. • Monitors understanding of others, develops approach and takes corrective action if required. <p>Written</p> <ul style="list-style-type: none"> • Conveys information of a complex, conceptual and specialist nature using a range of styles and media selected to meet the needs of others. • Presents complex information in formats appropriate to non-specialists without comprising meaning. • Monitors the reactions of others and takes appropriate steps to remedy any miscommunications.
	<p>Decision Making:</p> <p>Independent decisions</p> <ul style="list-style-type: none"> • Considers wider impact of decisions, assesses possible outcomes and their likelihood. • Uses judgment to make decisions with limited or ambiguous data and takes account of multiple factors.

	<ul style="list-style-type: none"> • Distinguishes between the need to make a decision, when to defer and when not to take a decision. <p>Collaborative decisions</p> <ul style="list-style-type: none"> • Helps others to explore options that initially appear to be inappropriate or unfeasible and recognise when a decision is or is not needed. • Enables others to contribute to decisions. • Ensures that options are weighed, outcomes identified and chances of success considered. • Challenges decisions, appropriately to ensure consideration and processes are robust. <p>Contribute to the decision making of others</p> <ul style="list-style-type: none"> • Anticipates and highlights issues that need to be taken into account. • Outlines possible impacting factors, assessing their degree of influence on the choice of options. • Ensures previous learning is included.
	<p>Initiative and Problem Solving:</p> <ul style="list-style-type: none"> • Analyses problems to identify their cause. • Takes action to prevent recurrence of problems. • Considers possible solutions to identify those which offer wider benefits. • Obtains evidence to support intuition.
	<p>Pastoral Care and Welfare:</p> <ul style="list-style-type: none"> • Calms and reassures those in distress. • Deals with difficult situations or confidential matters, according to policy and procedures. • Involves others or refers elsewhere for assistance if the situation becomes more complex and if additional help or information is required.
	<p>Service Delivery:</p> <ul style="list-style-type: none"> • Adapts services and systems to meet customers' needs and identifies ways of improving standards. • Learns from complaints and takes action to resolve them. • Collates feedback and views from customers and keeps up-to-date with market trends to inform service development and make changes. • Actively promotes services.
	<p>Teaching and Learning Support:</p> <ul style="list-style-type: none"> • Contributes to the long term planning and development of learning programmes. • Continuously reviews areas identified for improvement and develops content and delivery methods, learning support and assessment mechanisms. • Mentors other staff outside the immediate work team. • Reflects on own and others practice and develops insights into the learning process.
	<p>Teamwork and Motivation:</p> <ul style="list-style-type: none"> • Helps to clarify priorities and ensure they are understood by all. • Supports colleagues in need of extra help. • Monitors progress and takes appropriate action to deal with difficulties or slippage.
Date Completed:	August 2020