



| <b>Job Description &amp; Person Specification</b>                           |                                     |
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| <b>Post title:</b> Senior Lecturer in Electronic and Electrical Engineering | <b>Post No:</b> JR00XXXX            |
| <b>School or Department:</b> Department of Engineering                      | <b>Date created:</b> 07 / 04 / 2022 |
| <b>Grade:</b> Senior Lecturer Grade I                                       | <b>Hours per week:</b> 37           |
| <b>Fixed term end date</b> (if applicable):                                 |                                     |
| <b>Other requirements of the role:</b>                                      |                                     |
| <b>Immediate line manager:</b> Course Manager or Principal Lecturer         |                                     |
| <b>Title &amp; Grade of posts line managed by postholder:</b> n/a           |                                     |
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**Job purpose:** To teach Engineering at undergraduate and postgraduate levels and to contribute to the development, assessment and management of academic courses within the subject area; in addition to undertaking relevant research, scholarship, commercial and consultancy activities.

**Principal duties and responsibilities:** The role will encompass all of the following, but the balance of duties and responsibilities will be determined in discussion with the post holder's line manager:

**A) Subject Area**

1. Teaching in one or more of Electrical and Electronic Engineering / Mechanical Engineering / Sport Engineering / Biomedical Engineering and related disciplines.
2. Research aligned to an Engineering submission to the UK Research Excellence Framework (REF)

**B) Teaching, Learning and Assessment**

1. Teach and provide supervision at undergraduate and postgraduate levels on programmes within Engineering utilising appropriate teaching, learning, support and assessment methods. This to include undertaking marking, assessment and examination work and provision of timely feedback to students.
2. As a member of the course team and/or in a leadership position within the course team, participate and contribute to the management, planning, design, development and review of module and course content. Identifying areas for revision, improvement or innovation in order to meet student and/or industry expectations. Contribute to the accreditation of courses and quality management processes as necessary.
3. Responsibility for the delivery, leadership and assessment of own modules, including projects and dissertations
4. Develop a range of approaches to teaching and learning which are innovative for the University and subject area which create interest, understanding and enthusiasm amongst students and reflect developing practice elsewhere, e.g. case studies. Gather evidence from staff and students in order to prepare reviews of academic activity. Collaborate with colleagues to identify and respond to students' needs.

**Practice, Research and Scholarly Outputs and Impact**

1. Actively engage in individual or collaborative practice, research and/or scholarly projects to deliver high quality peer reviewed outputs
2. Apply knowledge acquired through practice, research and/or scholarly work to inform curriculum development, module design and teaching delivery
3. Contribute to impact case studies and/or activities which contribute to the creation of impact

#### **Income Generation**

1. Identify sources of funding and contribute to the process of securing income for own or collaborative practice, research and/or scholarship activities as appropriate.
2. Contribute to the generation of income which may include; consultancy, KTP, KEF or the development and delivery of short commercial courses

#### **Collaboration and Esteem**

1. Nurture and maintain relationships with national or international professional organisations within the subject field. This may involve links with professional bodies, e.g. re ongoing accreditation.
2. Liaise with national and/or international partners to ensure comparability of collaborative provision within the department.
3. Engage with and make an effective contribution to School or University wide initiatives.
4. Contribute to and undertake activities that build external profile and reputation.
5. Contribute to activities that enhance the teaching and learning and/or research environment, such as undertaking peer review activities.

#### **Academic Management and Administration**

1. Where required undertake effective course leadership which contributes to the enhancement of the running of courses in the department
2. Act as an effective module leader and tutor.
3. Participate in the University's appraisal process, developing and agreeing stretching and SMART objectives across a range of areas of academic activities.
4. Ensure that knowledge of the relevant subject area is fully up to date by actively engaging in continuous professional development and scholarly activities appropriate to the post.
5. Responsible for the pastoral care and motivation of students, supporting them in learning difficulties, and on occasion personal difficulties, ensuring that appropriate internal or external specialist support for the latter is sought.
6. Prepare, organise and assist with student cultural visits, exhibitions, field trips and placements and to attend all events as appropriate, including Graduation days and open days, relevant to the courses taught by the post holder.
7. Work effectively with colleagues within the course team, department and School. Attendance at team meetings as required, and working cooperatively with Professional Services and technical team colleagues.
8. Support and mentor colleagues with less experience and advise them on professional development; this may include the induction of new colleagues.
9. Make an effective contribution to the smooth running of the Department, including undertake administrative duties appropriate to the post, including admissions, timetabling and adherence to University procedures.
10. Responsible for being aware of the risks in the work environment, and their potential impact on own work and that of others, including being aware of any relevant risk assessments in place and adherence to these and undertaking any relevant health and safety training. May be expected to conduct risk assessments and take responsibility for the health and safety of others.

**N.B.** The post-holder may be required to undertake any other duties which may reasonably be required as within the nature of the duties and responsibilities of the post as defined, subject to the proviso that normally any changes of a permanent nature shall be incorporated into the job description in specific terms.

## Personal Attributes

| Attributes               | Essential   | Desirable   |
|--------------------------|---|---|
| <p><b>Knowledge</b></p>  | <p>Understanding of the major subject areas within the relevant discipline</p> <p>An understanding of relevant contemporary issues of particular significance for the future development of the industry and profession.</p> <p>Detailed knowledge of one or more of the following areas to Undergraduate and Postgraduate level as appropriate:</p> <ul style="list-style-type: none"> <li>• Electrical Engineering</li> <li>• Electrical power generation and transmission</li> <li>• Renewable power systems</li> </ul> <p>Core workshop, laboratory, practical, analysis and project planning/management/delivery skills applicable across a multi-disciplinary suite of engineering courses.</p> | <p>Detailed knowledge of contemporary teaching practices within Higher Education (HE)</p> <p>An understanding of the research context and ethos of the field within the UK Higher Education Sector</p> <p>An understanding of the CDIO educational framework.</p> |
| <p><b>Skills</b></p>     | <p>Good interpersonal skills and an ability to communicate complex ideas effectively to students using a variety of teaching methods, thereby enhancing the student experience</p> <p>Excellent technical skills and fully conversant with appropriate industry standard software/professional practices</p> <p>Ability to undertake scholarly and/or practice-based activity and/or conduct research in the discipline</p> <p>Proven ability to develop internal and external networks</p> <p>Good administrative, IT, analytical and planning skills</p>  | <p>Ability to manage academic processes in a Higher Education environment</p> <p>An ability to empathise with staff and students and have an understanding of the issues affecting HE</p> <p>Ability to develop materials for public engagement</p>               |
| <p><b>Experience</b></p> | <p>Higher Education teaching experience in a relevant subject area(s), which includes a range of teaching learning and assessment methods.</p> <p>Experience of evaluating the effectiveness of teaching and assessment methods</p>   | <p>Experience of facilitating independent study</p> <p>Experience of contributing to course review and/or accreditation processes</p> <p>Experience of designing and delivering blended learning in HE.</p>   |

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|                              | <p>Experience of effectively contributing to curriculum design and development</p> <p>A track record of engaging in continuous professional development</p> <p>Experience of academic administration and organisational responsibilities, ideally within a HE environment</p> <p>Proven research track record as evidenced publications in relevant peer reviewed journals within the last four years, eligible for submission to the next UK Research Excellence Framework (REF) exercise 'Engineering' Unit of Assessment.</p> <p>A research track record in one or more areas of:</p> <ul style="list-style-type: none"> <li>• Electrical systems</li> <li>• Sustainable power generation, transmission and storage</li> <li>• Battery technologies</li> </ul> | <p>Experience of delivering courses using the CDIO framework.</p> <p>A track record of writing successful research funding applications.</p> <p>Ability to generate third stream income from contractual or research activity.</p> |
| <p><b>Qualifications</b></p> | <p>A PhD in a relevant subject area</p> <p>Fellowship of the Higher Education Academy (FHEA)<br/> <i>Note: Newly appointed Senior Lecturers who do not already hold FHEA will be required to achieve this within 3 years of starting at NTU</i></p> <p>A Higher Education teaching qualification such as a PGCHE or PGCert in Academic Practice or equivalent<br/> <i>Note: Newly appointed Senior Lecturers who do not already hold a qualification to teach in Higher Education, will be required to complete NTU's Academic Professional Standard Apprenticeship (APA) or Postgraduate Certificate in Academic Practice (PGCAP) within 3 years of starting at NTU</i></p>  | <p>Active membership of relevant Professional bodies</p> <p>Senior Fellow of the Higher Education Academy</p> <p>CEng</p>  |

## Competencies

### Essential Competencies

**Organisation and delivery (Level 2)**

Plans time taking account of organisational priorities and other colleagues' work roles to achieve results

**Team working (Level 2)**

Contributes to team development, seeking and testing improvements to the team's outputs/service

**Communicating and influencing (Level 3)**

Communicates effectively with a wide range of diverse internal and external stakeholders, influencing and negotiating change. Networks internally to keep ahead of developments

**Creativity and Innovation (Level 3)**

Reviews, tests and implements new concepts, models and approaches to practice in support of service implementation and delivery

**Making informed decisions (Level 2)**

Uses analyses, reports and data to test the validity of options and assess risk before taking decisions. Ensures optimum decisions are taken

**Customer focus (Level 2)**

Works to identify customer needs. Seeks feedback and develops service delivery accordingly.  
Influences and develops ideas to enhance customer satisfaction

[N.B All competencies should be drawn from the NTU Competency Framework which can be found [here](#)]

**Job Description and Person Specification created by:**

Dr Ben Simpson, Deputy Head of Department of Engineering

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