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| THE UNIVERSITY OF NOTTINGHAM  Role Profile Form |

**Job Title:** Assistant Professor in Earth Observation

**School/Department:** Faculty of Engineering

**Salary:** £34,576 - £46,414 per annum depending on skills and experience. Salary progression beyond this scale is subject to performance

**Job Family and Level:** Research and Teaching Extended Level 5

**Contract Status:** Permanent

**Hours of Work:** Full-time (36.25 hours per week)

**Location:** Nottingham Geospatial Institute, Jubilee Campus

**Reporting to:** Director of the Nottingham Geospatial Institute

**Purpose of the Role:**

The person appointed to this position will be required to lead and deliver research, both individual and collaborative, in the broadly defined area of Earth Observation, and teaching in one of the key disciplines within the Faculty (Architecture and the Built Environment, Chemical and Environmental, Civil, Electrical and Electronic and/or Mechanical, Materials and Manufacturing Engineering).

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|  | **Main Responsibilities** |
| 1. | To take the lead on, plan, develop and conduct individual and/or collaborative research objectives, projects and proposals either as an individual or as part of a broader programme. |
| 2. | To establish a national reputation and regularly disseminate and explain research findings through leading peer-reviewed international publications (on a sustained basis), conferences and other appropriate media. |
| 3. | To generate income by developing and winning support for innovative research proposals and funding bids. Where appropriate undertake consultancy projects where there is a demonstrable benefit to the University, Faculty and Nottingham Geospatial Institute. |
| 4. | To deliver teaching across a range of modules or within a subject area, providing curriculum leadership within own area of expertise. |
| 5. | Be responsible for the design of course modules and/or programmes of study in specialist area and for their quality. Where appropriate identify the need for developing the content or structure of existing modules and make proposals on how this should be achieved. |
| 6. | To supervise and examine post graduate, Masters and PhD students. |
| 7. | To coach and support tutorial groups, developing their knowledge and their learning skills, and be responsible for the pastoral care of students within a specified area, dealing with sensitive issues. |
| 8. | Be responsible for and comply with The University of Nottingham Teaching Quality assurance standards and procedures. Ensure teaching quality assessment and assessment of progress and other information is maintained and supplied to the University as required. |
| 9. | To build relationships and collaborate actively with internal and external contacts (particularly BGS), nationally and if appropriate internationally to complete research projects and to advance the discipline. |
| 10. | To develop opportunities for research to have impact outside of academia, engaging with industry and knowledge exchange, where appropriate. |
| 11. | Be responsible for administrative duties in areas such as admissions, timetabling, examinations, student attendance, and represent the school on various committees and working groups in the wider University and outside of the University and managing or monitoring assets and budgets allocated as part of the role. |
| 12. | To contribute to student recruitment and secure student placements and provide appropriate advice to others involved in this activity. |
| 13. | Be responsible for the safe conduct of work within work area and teaching responsibilities ensuring that the School's arrangements for compliance with the University Safety Policy are implemented. |
| 14. | Be responsible for and supervise practical work, including projects, field trips or placements, where it is part of the course, and advise students on techniques. |
| 15. | To act as a line manager to staff (e.g. researchers, technicians) and supervise the work of others, in subject curriculum teams including performance review. |
| 16. | To coach and support colleagues in developing their research and teaching techniques.  Acting as a mentor to colleagues with less experience and providing advice on personal development. |
| 17. | To co-ordinate the work of colleagues to ensure modules are delivered to the required quality standards and there is equitable access to resources and facilities. |

**Knowledge, Skills, Qualifications & Experience**

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|  | **Essential** | **Desirable** |
| **Qualifications/ Education** | * First degree (or equivalent) in either: Architecture & the Built Environment, Chemical & Environmental, Civil, Electrical & Electronic or Mechanical, Materials & Manufacturing Engineering * A PhD (or equivalent) in Earth Observation or a related subject | * Higher Education teaching qualification or equivalent * Membership of a professional body or Learned Society, where appropriate |
| **Skills/Training** | * Image processing skills using either one of the standard packages, such as ENVI, or the ability to code algorithms in an appropriate language * Excellent oral and written communication skills, including the ability to communicate with clarity complex and conceptual ideas to those with limited knowledge and understanding as well as to peers, using high level skills and a range of media * Ability to manage resources and an understanding of management processes * High level analytical capability to facilitate conceptual thinking, innovation and creativity * Skills in counselling, pastoral care and motivating students * Emerging skills in managing and motivating staff * Ability to build relationships and collaborate with others, internally and externally * Proven track record in inter-disciplinary collaboration, and strong ability to develop future collaborations between Nottingham’s Geospatial Institute (NGI) and Geo-Energy Research Centre (GERC) |  |
| **Experience** | * Experience in remote sensing data acquisition, processing, interpretation and use in value added applications * Experience developing research methodologies and devising models, approaches, techniques, critiques and methods * Experience managing field projects, including survey design, coordinating multiple field operations, equipment deployment and installation * Experience and achievement in chosen field, reflected in growing and consistent national reputation * Evidence of a consistent track record of published research in peer reviewed journals with growing impact * Experience and demonstrated success in delivering teaching within an agreed quality framework | * Experience of energy-related remote sensing applications, evidenced through a growing international reputation * Experience of data sampling and troubleshooting (equipment and operations) * Extensive experience and demonstrated success in delivering research results |

**Decision Making**

**i) Taken independently by the role holder;**

* Planning general research programme and direction
* Making individual decisions about design and conduct of particular experiments
* Devising applications for new research funding
* Planning the content and delivery of teaching

**ii) Taken in collaboration with others;**

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| * Collaborative research applications * Structure/content of joint modules |

**iii) Referred to the appropriate line manager by the role holder;**

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| * Any items implying changes in Faculty policy |