

POSITION DESCRIPTION



WESTERN SYDNEY
UNIVERSITY



Principal Fellow in Remote Sensing

POSITION DETAILS

Position Title	Principal Fellow in Remote Sensing
Classification	Academic Level D (0.2 FTE)
Position Number	7016378
School/Office	Hawkesbury Institute for the Environment
Division	Provost

POSITION PURPOSE

The Principal Fellow in Remote Sensing will provide strategic expertise in remote sensing and geospatial analysis to strengthen the Hawkesbury Institute for the Environment's capacity to monitor and understand environmental change across landscapes.

The Principle Fellow will enhance the Institute's research programs in ecosystem monitoring, vegetation dynamics, and land use change by integrating advanced spatial data and remote sensing approaches within interdisciplinary environmental research. The role will support existing research projects while contributing to the development of new collaborative initiatives that leverage geospatial technologies to address key environmental challenges.

Operating at a fractional appointment (0.2 FTE), the Principal Fellow will provide scientific input into research design, spatial data analysis, and environmental monitoring frameworks. The role will also support Higher Degree Research students, mentor early career researchers within the Institute, and contribute to strengthening the Institute's capacity to integrate remote sensing and spatial analytics into its research portfolio. Further, the role will be encouraged to contribute to development of proposal seeking external funding.

KEY ACCOUNTABILITIES

1. Provide strategic expertise in remote sensing and geospatial analysis to support research programs focused on monitoring environmental change, including vegetation dynamics and land use patterns.
2. Contribute to the design and development of environmental monitoring approaches that integrate remote sensing, spatial modelling, and field-based ecological data.

3. Prepare and support the development of new collaborative research initiatives and funding opportunities that expand the Institute's capacity in spatial environmental monitoring.
4. Contribute to the supervision of post graduate research and support their progression.
5. Mentor early career researchers and contribute to strengthening research capability within the Institute and the School of Science.
6. Promote and engage research links with outside bodies and external partners including government agencies and research organisations involved in environmental monitoring, spatial data analysis, and landscape management.
7. Provide intellectual leadership in the integration of geospatial technologies within interdisciplinary environmental research programs at the Institute.

QUALIFICATIONS, EXPERIENCE AND SKILLS

1. A PhD in Remote Sensing, Geospatial Science, Environmental Science, Spatial Data Applications, or a related discipline, together with demonstrated excellence and outstanding contribution to research and its applications and impact in government or industry.
2. Demonstrated expertise and recognized leadership in remote sensing and geospatial analysis applied to environmental monitoring, including vegetation or land use mapping. They will have an established reputation as a scholar and practitioner in working with large geospatial datasets, time-series remote sensing data, and spatial environmental monitoring systems.
3. Strong technical capability in spatial data analysis and modelling using GIS and analytical programming environments (e.g. Python, R or similar) and demonstrated delivery of impactful applications and outcomes to science, government or industry.
4. Ability to advise and contribute to interdisciplinary research and collaborative projects addressing environmental change.
5. Excellent communication and collaboration skills, with the ability to work effectively with researchers, students, and external partners.
6. Demonstrated national leadership and scholarly reputation through a record of high-quality publications, conference papers, reports and/or technical contributions and impact in the discipline.

KEY RELATIONSHIPS

- **This position reports to:** Professor (7007495)
- **This position supervises:** N/A
- **Key internal relationships:**
 - Institute Director
 - Director of Research
 - Supervisor
 - Colleagues within the Institute and University
 - Students
- **Key external relationships:**
 - Government departments and Agencies
 - Partner and Funding institutions

CHALLENGES

- Building and sustaining interdisciplinary collaboration across faculties and external networks.
- Leading research projects and teams, including high-quality supervision of postgraduate research.
- Developing relationships with industry and community partners and contributing to the securing of external funding.

UNIVERSITY EXPECTATIONS

The University expects that all employees are aware of, and comply with legislation and Western's policies and procedures relevant to the position, including but not limited to:

- Code of Conduct
- Work Health and Safety and Wellbeing Management System
- Enterprise Agreement or Award
- Anti-discrimination principles, Equal Employment Opportunity and staff and student equity.

Approved by: Provost

Date: 28/05/2026