

Position Title	Lecturer
Classification	Level B
School/Division	UWA School of Agriculture and Environment and School of Engineering
Centre/Section	Department of Agriculture
Supervisor Title	Head of School
Supervisor Position Number	303032
Position Number	NEW

Your work area

The position will sit jointly between the UWA School of Agriculture and Environment and the School of Engineering. The UWA School of Agriculture and Environment spans the broad disciplines of Agricultural and Resource Economics, Agricultural Science, Agricultural Technology, and Environmental Science while the School of Engineering encompasses Chemical engineering, Civil, environmental and mining engineering, Electrical, electronic and computer engineering and Mechanical engineering. Both Schools provide broad-based undergraduate and postgraduate programs with solid foundations across disciplines to offer solutions to challenges facing industry, our communities and our environment. Both Schools have a commitment to high impact research and quality teaching across disciplines. Teaching and research in both Schools benefit from a network of national and international collaborators, and they have a strong track record in PhD supervision and external research grant success. Teaching and Research is translated into practice and policy through the strong industry and government links in areas related to agricultural and environmental management, mining development and production, offshore engineering, agricultural and environment machinery development and regional development. Both Schools are partners in the UWA Institute of Agriculture and the UWA Centre for Engineering Innovation: Agriculture & Ecological Restoration with the UWA School of Agricultural and Environment hosting the Annual Legume Breeding Australia Joint Venture with DLF Seeds and the Australian Herbicide Resistance Initiative.

Reporting structure

Reports to: Head of School

Your role

The Schools are looking to build further capacity in the area of Agricultural Engineering in rainfed broadacre mixed farming systems in close collaboration with the Centre for Engineering Innovation: Agriculture & Ecological Restoration. The successful applicant will, at the undergraduate and postgraduate level, lead curriculum development in Agricultural Engineering, coordinate units and deliver world-class teaching. They will also supervise Honours, Masters and PhD research students, develop new research in the discipline and strengthen collaboration among researchers within and outside the Schools, nationally and internationally.

Your key responsibilities

Develop a research team to initiate research in local, national and international arenas, across the broad scope of agricultural engineering in temperate agricultural systems

Engage with a network of contacts with local, national and international universities for the purposes of research collaboration and the enhancement of the reputation of the Schools and the University

Contribute to world-class teaching and unit coordination in the Agricultural Science and Engineering degree programs at both Undergraduate and Postgraduate levels and undertake related administrative duties as required, including curriculum development

Provide high quality supervision of Honours, Masters and PhD students

Either as an individual or as part of a team, play a role in bids for major research funding from national and international competitive funding agencies, industry and government partners

Represent the University through involvement in professional associations, conferences, non-academic (e.g. government, not-for-profit, industry) partnerships, and other external activities

Contribute to team activities such as team and school meetings, strategic planning and program development

Work within the legislative requirements of the University and support the University's commitment to inclusion and diversity

Perform other duties as directed by the Heads of School

Your specific work capabilities (selection criteria)

- A PhD in agricultural engineering, or other higher professional qualifications appropriate to the discipline
- Demonstratable experience with use of agricultural engineering to address challenges in agricultural systems
- Training or experience in one or more of precision agriculture, artificial intelligence, remote sensing, imaging-based automatic inspection, robotic and/or mechanical harvesting, or machinery design and adaptation for Australian conditions
- Evidence of capacity for high-quality teaching, curriculum development and unit coordination in Agricultural Science and/or Engineering (essential), or both (desirable), and of a commitment to continuous improvement and enhancement of the experience of a highly diverse student cohort
- A strong understanding of rainfed broadacre mixed cropping and livestock farming systems in temperate climates
- A track record relative to opportunity of original research and/or industry impact in Agriculture and Engineering (essential), including high-quality publication outputs and evidence of securing research funding (desirable)
- Mechanical drawing and design proficiency from concept generation, embodiment design (including 3D CAD), to functioning prototype construction (essential)
- Experience and proficiency with data analysis, coding using software/languages such as R, Python, Matlab, Mathematica etc (essential) and artificial intelligence (desirable)
- Demonstratable ability to work collegially with diverse groups, both internal and external to the University with evidence of effective leadership and teamwork, team-building and mentoring
- Demonstrated evidence of successful supervision or co-supervision of postgraduate research projects for Honours, Masters or PhD students, relative to opportunity
- Excellent interpersonal and communication skills, particularly with regards to undergraduate and postgraduate students, and experience developing collaborations and liaison with industry, farmers and local and international organisations

Special requirements (selection criteria)

Occasional interstate and international travel may be required

Occasional weekend work

Current "C" class driver's licence

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct hr.uwa.edu.au/policies/policies/conduct/code/conduct

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing safety.uwa.edu.au/