The University of Waikato
Te Whare Wānanga o Waikato

POSITION DESCRIPTION

Senior Lecturer –
Mechatronics Engineering / Electrical and Electronics Engineering

Vision
We will
- deliver a world-class education and research portfolio
- provide a full and dynamic university experience which is distinctive in character
- pursue strong international linkages to advance knowledge

The over-arching themes of this *Vision* are:
- Excellence
- Distinctiveness
- International Connectedness

Values
Ko te mana o Te Whare Wānanga o Waikato ka herea ki tō tātou:
- Tu ngātahi me te Māori
- Mahi pono
- Whakanui i ngā huarahi hou
- Whakarewa i te hiringa i te mahara

The University of Waikato places a high value on:
- Partnership with Māori
- Acting with integrity
- Celebrating diversity
- Promoting creativity

1. GENERAL

The Division of Health, Engineering, Computing and Science undertakes teaching and research in a range of core disciplines grouped under four academic schools. The Division also has several research units, and commercial/equipment units, which embody staff and research activities.

- The School of Engineering offers accredited BE(Hons) degree programmes in Chemical & Biological Engineering, Civil Engineering, Electrical and Electronics Engineering, Environmental Engineering, Materials & Process Engineering, Mechatronic Engineering, Mechanical Engineering, and a Diploma in Engineering Management. The School of Engineering also offers both taught and research Masters as well as PhDs. Research and development strengths are in, construction, infrastructure and structural engineering energy, water, automation, robotics, sensing, electrical power systems, biomedical engineering and materials.

2. POSITION PURPOSE

To contribute to the teaching, postgraduate supervision and administration requirements of the School of Engineering in accordance with workload norms, maintain and develop original scholarship and research, and undertake professional/community/iwi service activities relevant to the profession or discipline.

3. ACCOUNTABILITY

For academic issues, objectives, development and reflection (ODR) and performance review, the position is responsible to the Dean of the School of Engineering and for Teaching related queries is supervised by the Programme Leader.

4. KEY RELATIONSHIPS:

Internal:
Pro Vice-Chancellor of the Division of Health, Engineering, Computing and Science or designate
Dean of Engineering
Electrical and Electronics Engineering Programme leader
Mechatronics Engineering Programme leader
Other academic staff in School
School Administrative and Technical staff
Sessional Assistants
Students
Relevant Research Institutes and Centres and external research
agencies External stakeholders

5. KEY TASKS

Having regard to the aims, objectives and long-term strategic goals of the School of Engineering, Division and the University, the primary objectives required of a Senior Lecturer include the following:

Teaching and Learning

- Prepare and deliver high quality research-informed lectures and/or seminars and, as appropriate, conduct and/or co-ordinate tutorials, practical classes, demonstrations, or workshops.
- Contribute to or be responsible for paper co-ordination and delivery. This includes: administration; initiating and developing material; appraisal, review and evaluation of programmes and papers; development of the curriculum; where appropriate; and updating teaching resources and materials.
- Develop appropriate student assessments, including the setting of examinations, and provide regular, timely, and constructive feedback to students.
- Promote the development of critical thinking, communication, and research skills.
- Be readily available to advise and meet with students, including maintaining regular office hours.
- Supervise honours, graduate and postgraduate students.
- Where appropriate, be Chief Supervisor forPhD students.
- Participate in professional development activities to ensure teaching practices are relevant to use appropriate pedagogical practices.

Research

- Establish a research agenda, conduct quality research, and contribute to knowledge development.
- Seek out and apply for external research funding and engage in knowledge transfer and commercialisation activities.
- Develop a robust research portfolio demonstrated through regular research outputs in the form of appropriate publications, presentations, and reports.
- Leading a research team and/or obtaining internal or external research funding for specific projects.
- Build and maintain national, and international, research collaborations that enhance the university's profile and reputation.
- Attract and support post-graduate students enabling them to develop their research complete research degrees.

Service and Administration

- Participate in professional and/or community/iwi and/or outreach activities relevant to the School.
- Carry out broad administrative functions, including active and constructive participation at Programme/Division and/or School meetings, and undertake administration, planning and/or committee work where appropriate.

- Support the university's reputation through engagement in student recruitment activities, participation in national advisory boards, contribution to national and international professional groups, and providing media interviews.

Other

- Participate in maintaining a safe and healthy work environment for self and others including students. Comply with and undertake responsibilities set out in the University's Health and Safety Policy.
- Any other duties that are consistent with the position held, other than in exceptional circumstances such as rehabilitation after injury or sickness.

NOTE: Staff will have an annual objectives, development and reflection (ODR) meeting with their manager. New staff normally attend such a meeting approximately three months after taking up their appointment.

6. PERFORMANCE STANDARDS

The Senior Lecturer will be performing satisfactorily when:

- Teaching and associated duties are fulfilled to an acceptably high level of competency defined by School/Division expectations.
- Student learning, at all levels, is appropriately facilitated in accordance with the School/Division and University's goals and objectives.
- Personal and/or team research and scholarship activities yield demonstrable outcomes normally evidenced by both continued publications in books and refereed journals and presentation or publication of conference papers; and/or industry sponsored research activities.
- Research collaborations are developed.
- Research grant applications are submitted.
- Regular contributions are made to appropriate professional groups and/or in a public service or University or national representation capacity.
- Regular contributions are made to the School administration, as appropriate, relative to workload norms and expectations.
- Safe and healthy work practices are followed. University policies and procedures, relevant work standards and statutory obligations are complied with.

PERSON SPECIFICATION

EDUCATIONAL QUALIFICATIONS

Essential

- A PhD in Mechatronics, Electrical or Electronics Engineering

Preferred

- Chartered Engineer.

TRAINING, SKILLS AND KNOWLEDGE

Essential

- Broad knowledge in electrical, electronics and mechatronics engineering, with evidence of advanced/specialist knowledge in at least one field of:
    - Electrical systems (battery, power electronics, electrical drives, smart grids); and/or
    - Mechatronics design; and/or
    - Microprocessor systems with analogue electronics
- Demonstrated success in undergraduate teaching including use of effective teaching methodologies for settings ranging from large lectures to small labs and tutorials.
- Demonstrated ability to conduct research (through publications) or proven track record of excellence in design.
- A proven ability to communicate effectively with students and staff.
- Exceptional ability to apply information and communication technologies to achieve desired outcomes.
- Time management skills.
- Ability to contribute to the graduate and postgraduate teaching programme including the supervision of Honours, Masters and PhD students.
- Evidence of the pursuit of lifelong learning to inform teaching, research, and services to the University.

Preferred

- Versatility is important.
  The School of Engineering teaching and research are loosely grouped into clusters. It is important that all members of the School are able to teach and work across School/ programme/ discipline boundaries within the cluster. We are looking for a person who can make active contributions to the following programmes: Electrical & Electronics Engineering, Mechatronics Engineering, (to a lesser extent) Software Engineering.
- Experience in mechatronics hardware and software systems integration projects.

PERSONAL QUALITIES

- Self-motivation and a pro-active approach including a demonstrated commitment to innovation.
- Demonstrated capacity to work effectively as a member of a team.
- Ability to relate effectively and sensitively to students and staff from a variety of backgrounds and cultures.
- Commitment to maintaining and updating information and communication technology skills.
- Commitment to a culture of openness, flexibility and cooperation to achieve excellence in academic programmes, research and service.
- A commitment to equal opportunity for all.

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