

POSITION DESCRIPTION

Advanced Technical Officer in Civil Engineering

Reports to:	Technical Team Leader - MECC
Division:	STEM - School of Engineering Technical
Tenure:	Permanent
Location:	Hamilton campus
Date:	April 2026

Vision

Ko te tangata

A research-intensive university providing a globally connected, innovative and inclusive studenty experience in an environment characterised by a commitment to diversity, respect for Indigenous knowledge, and high levels of community engagement.

Values

Ko te mana o Te Whare Wānanga o Waikato ka herea ki tō tātou:

- Tū 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 STEM comprises three Schools (Computing and Mathematical Sciences, Engineering and Science) and several research units, including the Artificial Intelligence Institute and commercial/equipment units.

The School of Engineering (Te Kura Mata- Ao) offers accredited BE(Hons) degree programmes in Chemical & Processing Engineering, Civil Engineering, Electrical and Electronic Engineering, Environmental Engineering, Materials & Process Engineering, Mechatronic Engineering,

Mechanical Engineering, and a graduate 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, thermomechanical analysis and advanced materials.

2. POSITION PURPOSE

To provide high quality technical support for teaching programmes, external contracts, research and commercial activities associated with Civil Engineering in the School.

3. ACCOUNTABILITY

The Technical Officer is responsible to the Technical Team Leader of the School of Engineering.

4. FUNCTIONAL RELATIONSHIPS

Internal: Dean of School of Engineering
Technical Manager
Technical Team Leader
Academic staff/ Programme leaders
Technical staff
Postgraduate/graduate students
Undergraduate students
Services staff
Administrative staff

External: Contractors and Suppliers - sourcing, ordering and maintaining equipment, consumables and other items as required
Clients - commercial requests, collaborative projects and equipment use

5. KEY RESPONSIBILITIES

Technical and Laboratory Support

- Deliver high-quality technical support for teaching, research, and commercial activities, ensuring equipment and systems function reliably.
- Develop techniques and train staff and students in the use of specialised equipment in the fields of Geotechnical and Civil Engineering.
- Prepare and maintain instrumentation, apparatus and materials for undergraduate and graduate laboratories.
- Provide expert technical advice and operational support for Civil Engineering field activities, including planning, coordination, and on-site support for teaching and research, and guidance to staff and students on fieldwork practices.
- Organize and coordinate laboratory activities to ensure timely execution, resource availability, and alignment with teaching and research schedules.
- Maintain a tidy, well-organised, and safe laboratory environment to support efficient workflows.

Instrumentation and Data Support

- Provide technical expertise for graduate and staff research projects, including the setup and operation of instrumentation and data acquisition systems.
- Set up, calibrate, and maintain a range of laboratory instrumentation including strain gauges, load cells, LVDTs, accelerometers, triaxial shear test apparatus, viscometers, as well as field equipment (shear vanes, scala penetrometers, augers and survey equipment).

- Operate and troubleshoot data acquisition systems, diagnosing and resolving technical issues across equipment, instrumentation, and software platforms to ensure accurate, reliable data collection and minimise disruption.
- Assist staff and students with experimental data analysis in support of research and teaching objectives.

Team Contribution and Continuous Improvement

- Work effectively as a member of the School of Engineering to support other team members and provide support and/or coverage of functions.
- Work collaboratively to encourage transparency across activities, open sharing of knowledge, and the building of positive relationships to support a high-performance culture.
- Actively contribute to the ongoing development and improvement of systems and processes.
- Work with other team members on projects.
- Support a positive culture and morale.

Health, Safety and Compliance

- Act as Laboratory Safety Supervisor for designated lab and project spaces, ensuring compliance with University health and safety policies.
- Compile and maintain standard operating procedures (SOPs) and hazard registers for equipment and processes.
- Maintain the fieldwork notification system, reviewing risk assessments associated with fieldwork.
- Manage school UAV operations to ensure safe practices and effective maintenance, working in coordination with the Chief Pilot to meet UoW and CAA requirements.
- Maintain a safe and healthy work environment for all users, fostering strong safety awareness and best practice.
- Contribute to the development and implementation of School and University occupational health and safety (OHS) initiatives and guidelines.

Other Duties

- Participate in School and University promotional activities, including stakeholder engagement, outreach programmes, marketing and events.
- Any other duties as required that are consistent with the position held, other than in exceptional circumstances such as rehabilitation after injury or sickness.

NOTE: Staff have an annual Objectives, Development and Reflection (ODR) meeting with their manager.

6. PERFORMANCE STANDARDS

The Technical Officer will be performing satisfactorily when:

- Teaching, research, and commercial activities are effectively supported and run as planned.
- The Technical Team Leader and Technical Manager are well supported.
- Projects are implemented successfully.
- Lab teaching programmes run smoothly and deliver quality outcomes.
- Timely and accurate technical advice is provided to students and staff.
- Equipment and materials are maintained to high standards and available when needed.
- Equipment and techniques are used correctly, safely, and consistently by all users.
- SOPs meet School and University requirements.
- Equipment life cycles are monitored, and future needs are planned.

- The School and University are positively represented.
- Safe work practices comply with policies, standards, and legal obligations.

PERSON SPECIFICATION

EDUCATIONAL QUALIFICATIONS

Essential

- A relevant tertiary qualification.

Preferred

- A tertiary qualification in Civil Engineering.

SKILLS, KNOWLEDGE and EXPERIENCE

Essential

- Demonstrated experience working in civil or geotechnical engineering environments.
- Extensive knowledge of Civil Engineering field and laboratory techniques.
- Proven expertise in the operation, testing, calibration, and maintenance of Civil Engineering laboratory and field equipment, including environmental monitoring systems.
- Experience supporting and participating in teaching and research fieldwork, including full-day field sampling and travel as required.
- Relevant experience in planning, logistics, and coordination of teaching and research fieldwork excursions, with strong attention to health and safety requirements.
- Solid understanding of health and safety legislation, including risk assessment and compliance.
- High level of ICT capability with strong analytical, data management, and problem-solving skills.
- Demonstrated ability to troubleshoot technical issues effectively.
- Ability to work independently, manage priorities, and meet deadlines.
- Project management skills, including planning, coordination, and implementation.
- Experience in laboratory site management and supervision.
- Excellent oral and written communication skills.
- Full New Zealand driver's licence.

Preferred

- Field/Workplace First Aid Certificate.
- 4WD training
- Forklift license
- UAV aerial surveying experience and certification

PERSONAL QUALITIES

- Ability to work with a diverse group of people and to work as part of a team.
- Attention to detail.
- Willingness to learn and develop technical skills as directed.
- Passion for helping students succeed in their academic studies and knowledge, as the next generation of engineers.
- Reliable, conscientious, adaptable and a positive attitude.
- Commitment to a culture of openness, flexibility and co-operation to achieve excellence in academic programmes, research and service.
- Commitment to equal opportunity and to the University's partnership with Māori as intended by the Treaty of Waitangi.

