Risk Technician



The purpose of this position is to support and contribute to the work undertaken by Risk Engineers and Risk Scientists in the Natural Hazards and Risks theme, through a variety of tasks including, hazard, vulnerability, exposure and risk data management and analysis, and undertaking risk modelling in RiskScape.

Reports to: Risk Engineering Team Leader

Department: Society and Infrastructure

Group: Science

Tenure: Permanent

Location: Avalon (Lower Hutt), Auckland or Dunedin

Direct reports: Nil

Budget: Nil

Career Path: Technician

Job Family: Research, Lab and Field Technology

Career Step: 5

Date: March 2024

Position priorities and responsibilities

Scientific Projects

- Manage and analyse spatial and non-spatial data relevant to risk science and engineering projects.
- Contribute to the development of exposure and risk models by working collaboratively across GNS Science.
- Contribute to research and/or consultancy projects in the areas of risk science and risk engineering.

Communication and Engagement

- Assist with communication, outreach and education initiatives for projects and programmes.
- Assist with internal and external engagement to understand information needs and uses.
- Contribute to publications and assist with presentations to stakeholders.

Research technical support

 Management and analysis of data in preparation for risk modelling, and development of exposure and risk models.

- Conduct literature reviews and prepare and contribute to research papers and articles for publications.
- Undertake projects for your manager as and when required.

Responsibilities of all staff

- Comply with all GNS Science policies and procedures.
- Contribute to making GNS Science a healthy and safe place to work by complying with the responsibilities and accountabilities outlined in the Health and Safety Management System Framework.
- The responsibilities of this position will change over time to respond to changing needs. The
 incumbent will need the flexibility to adapt and develop as the company and its environment
 evolves.

Key working relationships

Internal:

- Project leaders and project staff
- Society & Infrastructure Department staff
- Staff across GNS Science needing assistance with hazard and risk data management and analysis.

External:

• Universities, other CRIs, local and central government agencies, insurers, emergency management and emergency response agencies, when required.

Person specification

Skills, knowledge and attributes

Essential:

- Proven experience in managing and analysing large datasets.
- Proficiency in GIS software and data visualisation
- Expertise in statistical analysis
- Good written and verbal communication skills
- Broad understanding of work undertaken across GNS Science Themes (Natural Hazards & Risk;
 Environment & Climate; Energy Futures; Land & Marine Geoscience)

Desirable:

Proficiency in programming language (e.g. Python, Java)

Experience

Essential:

1-year relevant research/industry experience (including postgraduate studies)

Desirable:

2-years' relevant research/industry experience

Qualifications

Essential:

- Postgraduate qualification (MA; MSc; postgraduate diploma) in earth sciences, civil engineering, geography, disaster risk, or similar.
- Understanding of natural hazards and risk.

Desirable:

Qualifications (CoP; diploma etc) in data science or statistics

Other requirements

Essential:

Project management skills

Performance Dimensions

At a high level, GNS Science recognises six **Performance Dimensions**: three relate to technical capability, one relates to leadership (if applicable) and two relate to the *way* we work. Below are the general expectations that are the minimum standards expected of all staff. There are also expectations that specifically relate to the career step associated with the role; you can find these on GNS Online.

Technical capabilities

Scope, complexity and innovation

- Enduring commitment to maintaining and developing skills and knowledge in area of expertise.
- Both the ability and desire to apply appropriate rigour, principles and practices to deliver quality work in a cost-effective manner.
- Acts in a manner that conveys high personal and professional standards.
- Open to coaching and feedback incorporates suggestions to find better ways of doing things (to improve own and GNS Science performance).

Contribution to GNS Science / profession

- Establishes and maintains effective and collaborative working relationships with colleagues and external individuals and groups.
- Both the ability and commitment to work in a culturally responsive and inclusive manner;
 respecting and valuing the diverse perspectives of individuals and groups.
- Takes an interest in early career colleagues, graduates and students provides coaching and/or mentoring as appropriate. Supports initiatives to promote science careers.
- Prevents harm to self and others by carrying out duties safely and responsibly.

Delivery of work

- The ability and commitment to deliver pieces of work and projects on time to required quality, cost and benefit parameters.
- The application of appropriate project management rigour, principles and practices to delivering quality projects in a cost-effective manner

Behavioural expectations

Manaakitanga - we do the right thing

Champions a positive working culture. Works and interacts with colleagues, external partners, stakeholders and customers in a way that is consistent with our values:

- We are **CONNECTED** in our purpose; with each other, with partners and stakeholders and with our communities.
- We are **INSPIRED** by our work to explore, challenge, innovate and aim higher.
- We are **EMPOWERED** to be our best valued for our differences, encouraged to contribute and enabled to grow and develop.

Bicultural commitment

- As a Crown Research Institute, GNS Science is committed to partnering with iwi/hapū and Māori communities and agencies to achieve their science aspirations.
- We do this in a way that is culturally appropriate (**tikanga**) and honours Māori and non-Māori worldviews (**te ao**).

These expectations are intended to support and guide the development of individual staff.