

## Electronics Design & Development Engineer

<b>Reports to:</b>	Engineering / Electronics Workshops Supervisor	<b>Tenure:</b>	Permanent
<b>Department:</b>	Laboratories & Workshops	<b>Group:</b>	Science & Commercial Operations
<b>Location:</b>	Gracefield	<b>Direct Reports:</b>	Nil
<b>Budget:</b>	Nil	<b>Career Path:</b>	Specialist
<b>Job Family:</b>	Operations, Data & Technology	<b>Career Step:</b>	Specialist 1 / Band 6
<b>Date:</b>	May 2025		

### Purpose

To provide Electrical/Electronic support through the design and development of bespoke equipment to facilitate meeting the requirements of the science, processes and project challenges encountered at GNS/ESI. And provide service to existing commercial clients as and when required.

### Position Priorities and Responsibilities

#### Project Leadership & Design

- Plan, direct, and execute electronics projects from concept to completion.
- Assist in defining technical specifications for new initiatives.
- Lead the design of complex electronic instrumentation, including schematics and PCB layouts.
- Contribute to the development of microprocessor-based systems and data acquisition solutions.

#### Instrumentation Development & Support

- Implement, troubleshoot, and repair electronic systems and instrumentation.
- Support installation and safety checks of instrumentation both on-site and off-site.
- Prepare and maintain technical documentation for system maintenance and support.

#### Procurement & Lab Operations

- Select, source, and order electronic components and specialist equipment.
- Manage purchasing requirements for electronics and support other departments as needed.
- Oversee storage, safety, and operational standards in the industrial electronics lab.

#### Mentorship & Collaboration

- Mentor and train junior electronics technicians and assist students with short-term projects.

- Collaborate with internal teams and external clients to deliver tailored instrumentation solutions

### **Health and Safety**

- Champion a proactive health, safety, and wellbeing (HS&W) culture within the team by promoting best practices, encouraging open communication, and supporting continuous improvement initiatives.
- Ensure team members understand and implement HS&W responsibilities relevant to their roles, providing guidance, training, and resources as needed.
- Support incident investigations within the team, ensuring timely response, appropriate support for affected workers, and effective implementation of corrective actions.

### **Responsibilities of all Employees**

- Comply with the expectations that relate to your career step (you can find these on GNS Online).
- 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.
- Have an understanding or interest in Māori relationship and development issues and Te Reo Māori.
- Work effectively as a team member by fostering good relationships and supporting others by providing coverage of other functions as required and ensuring workloads are evenly spread.
- Have the flexibility to adapt and develop as the company and its environment evolves.

### **Key Working Relationships**

- To work with Workshops colleagues, Lab Managers/Technicians & Scientists to facilitate lab and field equipment performance and capability to meet requirements. To liaise with external clients and suppliers as and when required.

### **Person Specification**

#### **Skills, Knowledge and Attributes**

- Demonstrated expertise in the design and development of electronic systems and instrumentation.
- Proficient in using CAD software for schematic capture and PCB layout design.
- In-depth knowledge of microprocessor architectures and embedded system development.
- Strong analytical and diagnostic skills, with a focus on effective problem-solving and clear technical documentation.
- Proven ability to lead technical projects and provide mentorship to junior team members.

## Qualifications and Experience

### Essential

- Previous experience in an electronics design & build environment.
- Experience in electronics design & build in industrial/ scientific research environment.
- Electrical Service Technician certificate and Electrical Registration.
- Degree in Electrical/Electronic Engineering.

### Desirable

- NZ Certificate/Diploma in Electronics Engineering

## Other requirements

### Essential

- Current full NZ driver licence.
- Be prepared to work on irradiating apparatus.
- Be prepared to undertake training in high voltage.

### Desirable

- Current First Aid certificate.
- Forklift licence.