# Position Details

## Research Projects- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Electronics Engineer |
| Job Reference | 80402 |
| Tenure | Term 36 months |
| Salary Range | AU$117,917k - AU$138,176 k per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Lindfield |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian Citizens Only |
| Position reports to the | Team Leader – Electromechanical Development |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Scott Martin [scott.martin@csiro.au](mailto:scott.martin@csiro.au) +61 2 9413 7746 |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the area that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

The Electromechanical Development team uses CSIRO’s world-leading scientific capability in High Temperature Superconducting (HTS) electronic devices, circuits and sensors to develop advanced magnetometry. This is an exciting opportunity to join a ground-breaking team developing quantum sensing technologies for use in a variety of cutting-edge applications. Reporting functionally to a Principal Research Engineer, this role will provide practical support essential to the completion of key project deliverables.

### Duties and Key Result Areas

The Electronics Engineer will be responsible for the design, construction, programming and documentation of electronic control and support systems for the various CSIRO projects.

* Responsible for the development of electronic modules and circuits of research prototype systems, including:
* Electronic control and support systems for the various projects
* Testing and validation
* Electronic circuit design/layout
* Procurement of subsystems and liaison with suppliers
* Construction and testing
* Programming
* Documenting and contributing to internal and client reports
* Participation in and contribution to planning, budgeting and drafting of new proposals
* Preparation for and participation in field trials.
* Apply specialist expertise to solve complex problems within a discipline or across a diverse range of projects.
* Be responsible for activities such as developing and delivering novel technologies, developing and implementing project plans, analysing, validating and reporting results within the constraints of various project plans.
* May extend existing scientific knowledge of experimental design or digital experiences via achievements which facilitate the development of new perspectives in a field, or fields of, research and/or technology.
* Address ill-defined problems and make critical choices between options that require knowledge of the most recent scientific and/or technological developments or novel methodologies.
* Maintain an awareness of trends in research, technology and cross-functional technological/scientific innovations to target opportunities for uptake of research or technology.
* Identify and adapt quickly to changes in client or project needs and changes in the external environment.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Hold an electronics engineering degree with minimum 4-year post-qualification experience or equivalent.
2. Significant experience with analogue electronics.
3. Familiar with inter-chip communication protocols (e.g.: I2C, SPI, etc.)
4. Understanding of data logging and graphical data reporting.
5. Ability to use schematic capture and PC board layout software (Altium Designer preferred).
6. Ability to anticipate potential problems and contribute to identifying innovative solutions.
7. Sound judgement in selecting appropriate approaches to solving complex technical problems.
8. Excellent communication skills with a strong client focus, and a history of successful relations across a range of stakeholder groups.
9. The ability to work effectively both individually and as a member of a high-functioning technical team with members from diverse backgrounds.

## **Desirable:**

1. Relevant experience in a research environment
2. Experience and proficiency in programming, data manipulation, and data visualization using languages such as Python or MATLAB.
3. Ability to program in ANSI-C, C++.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other team as well as industry colleagues.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious, proposals / ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to and manages the increasing rate of organisational change by adjusting strategies, goals and priorities.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate will be required to obtain and maintain a security clearance at the level NV2*.*

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Manufacturing](https://www.csiro.au/en/Research/MF)