# Position Details

## Technical Services - CSOF5

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| The following information is for applicants |
| Advertised Job Title | Electronic Engineer |
| Job Reference | 83726 |
| Tenure | Indefinite, full-time |
| Salary Range | AU$102k - AU$111k per annum, plus up to 15.4% superannuation |
| Location(s) | Hobart, Tasmania |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian or New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Team Leader – Engineered Systems |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Jacques Malan via email Jacques.Malan@csiro.au or phone 03 6232 5267 |
| 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 or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas 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

This role of Electronic Engineer focuses on the development of novel electronic devices and systems to support research within CSIRO and with external partners. The role forms part of the Engineering and Technology (E&T) Program of the National Collections and Marine Infrastructure (NCMI) Business Unit.

The Electronic Engineer is responsible for the development of solutions for a wide variety of marine and atmospheric observing systems to meet research objectives. This will primarily involve the design of electronic systems, and will have responsibility at all stages of the design process, from project definition to delivery and support. The Electronic Engineer manages some projects while contributing into others. Management of projects will ensure on-time and on-budget delivery of novel research tools for internal and external customers.

### Duties and Key Result Areas:

* Work as part of a multi-disciplinary team to develop advanced systems and platforms to be used in oceanographic research projects.
* Liaise appropriately with clients and stakeholders to understand their project requirements and convey technical concepts effectively.
* Take personal responsibility for developing products in a timely manner to suit client needs.
* Under limited direction design or develop experimental equipment, techniques, systems or processes requiring high levels of initiative, ingenuity and skill.
* Take a leading role in projects, collaborating effectively with multi-disciplinary, regionally dispersed team members.
* Manage and supervise students as required.
* 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.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A Bachelor of Engineering (or equivalent relevant work experience), plus substantial experience as an electronic, embedded systems, and/or software engineer.
2. Demonstrated proficiency in:
* programming bare-metal C-language firmware for micro-controllers.
* developing graphical user interfaces for PC, web and/or mobiles.
* data manipulation and analysis with tools like Python, Matlab or similar.
* mixed-signal schematic design, PCB layout, hand-soldering, fault-finding and rectification.
1. Project management skills, including a proven ability to manage and deliver technically complex projects.
2. Demonstrable experience solving complex engineering problems encountered during the design and build of electronic systems.
3. Clear and accurate written and oral communication skills, with a proven sensitivity to the interests and priorities of stakeholders.
4. Demonstrated ability to work in teams to achieve objectives, and to collaborate effectively across teams and with industry partners.

## **Desirable:**

1. Proficiency in the use of real-time operating systems for micro-controllers like RTOS or similar.
2. Proficiency in high-level embedded software development (e.g. use of Raspberry Pi or other SOC with customised Linux builds).
3. Proficiency in FPGA hardware development and configuration in VHDL or Verilog and the implementation of soft- or hard-core controllers.
4. Proficiency in DSP implementation of communication systems like demodulation, filtering, etc.
5. Experience in the implementation of machine learning.
6. Experience developing and testing software for robotic systems like ROS.

## **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 teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **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:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

Special Requirements

The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [National Collections and Marine Infrastructure](https://www.csiro.au/en/about/people/business-units/NCMI) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted