# Senior Digital Electronic Technician/Engineer

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| Advertised Job Title**:** | Senior Digital Electronic Technician/Engineer |
| Reference Number**:** | 58138 |
| Classification**:** | CSOF 5  |
| Salary Range: | AU $95,369 to AU $103,205 plus up to 15.4% superannuation |
| Location**:** | New Norcia Ground Station, Western Australia |
| Tenure: | Indefinite |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications are Open To: | Australian Citizens and Permanent Residents |
| Functional Area**:** | Technical Services |
| Reports To: | M+O Manager |
| Number of Direct Reports: | TBA |

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| **Role Overview:** |
| The New Norcia Ground Station supports ground-based spacecraft telecommunications as part of the European Space Agency’s Tracking Stations Network (ESTRACK), under proposed contractual arrangements between ESA and Commonwealth Scientific Industrial Research Organisation (CSIRO). Under limited direction, the Senior Digital Electronic Technician/Engineer provides specialist technical support of baseband electronic and signal processing, with further support for IF and RF systems, including receiver and command systems. Areas of responsibility includes specialist support for baseband electronic, signal processing and timing systems, technical back-up to Senior RF Electronics Technician position, minor project and contractor management, performs or organises baseband electronics and signal processing, and timing systems maintenance activities on antennas. |

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| **Duties and Key Result Areas:** |
| * Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work as part of a multi-disciplinary, often regionally dispersed team, to carry out tasks autonomously in support of scientific research.
* Perform or co-ordinate maintenance and monitoring of baseband electronic, signal processing and timing systems to ESA or manufacturer’s specifications.
* Perform installation and maintenance of subsystems according to ESA’s configuration management processes, including:
	+ *Commissioning, upgrading, testing and calibrating the installations.*
	+ *Providing operational planned maintenance and system administration in a secure networked computer environment.*
	+ *Respond to faults and diagnose degradation in the performance of operational systems, including after hours support via telephone analysis where possible and attend onsite for diagnostics and repairs where necessary.*
	+ Provide mentoring to junior Electronic Systems technicians.
	+ Use established reporting tools and procedures to provide comprehensive reports.
	+ Provide support for ESA sponsored hardware and software development, including:
	+ *Assist in design changes to application and diagnostic software.*
	+ *Conduct the implementation of design enhancements.*
	+ *Assist with system validation on the overall system including the measurement and analysis of performance parameters for digital, baseband and RF signals.*
	+ *Ensure adherence to ESA configuration management and delivery procedures.*
	+ *Provides technical back-up to Senior RF Electronics Technician position.*
* Perform maintenance and installation activities while working at height or within confined spaces
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed****Pre-Requisites:***1. **Education/Qualifications:** Trades Certificate, Associated Diploma, Diploma, Degree in Engineering or Advanced Diploma in Electronics with 3 plus years’ experience in Engineering OR, 7 years plus for Technicians.
2. **Other Certifications:** WA Driver’s License.

***Essential Criteria:***1. Well-founded knowledge of digital electronics, programming principals, networking and system administration.
2. Exposure to real-time or embedded systems.
3. Demonstrated ability to process, interpret and present data and the ability to operate test equipment.
4. Knowledge of digital signal processing techniques, of timing and frequency systems.
5. Demonstrated ability to detect and diagnose hardware problems and complete repairs at the sub-assembly level.
6. The ability to work effectively as part of a multi-disciplinary, regionally dispersed team, and carry out tasks autonomously.
7. Excellent communication skills, both written and oral, including the ability to anticipate the interests and knowledge level of an audience and present information and feedback accordingly.
8. Demonstrated ability to effectively manage a number of competing priorities simultaneously, and carry out non-routine tasks under broad direction from relevant technical staff.

**Desirable Criteria:**1. Familiarity with telemetry and tele-command processes, ranging equipment, fully digital modem with an understanding of space link protocol related features.
2. Knowledge of system performance measurement techniques including error rates etc.
3. Working knowledge of RF systems.
4. Familiarity with administering UNIX systems such as the Linux/Solaris operating system.
5. Experience with spectrum analysers, oscilloscopes, signal generators etc.
6. Experience with Microsoft Office products.

**Special Requirements:** Appointment to this role may be subject to conditions including security/medical/character clearance requirements. You must also be willing and able to:1. Work to a call out roster for all technical staff to provide out of hours coverage for critical equipment failures.
2. Support pre planned out of hours critical tracking events.
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| **Other Information:** |
| **To express your interest:** Please go to <https://jobs@csiro.au> and enter reference 58138 and click **Apply**. First create a profile, then upload your resume and cover letter. In your cover letter please tell us how your skills, knowledge and experience meet the selection criteria.If after reading the Position Description you require further information please contact Lesley Kliska at lesley.kliska@csiro.au. Please note: applications sent to Mrs Kliska may not be considered.If you experience difficulties applying online please call 1300 984 220 for assistance or email:   csiro-careers@csiro.au. *We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you.* *Find out more!*[*CSIRO Balance*](https://www.csiro.au/en/Careers/A-great-place-to-work/Work-life-balance)**About CSIRO**At CSIRO, we do the extraordinary every day. We innovate for tomorrow and help improve today - for our customers, all Australians and the world.We imagine. We collaborate. We innovate. |