Selection Documentation
2024 Technologist Campaign
Hardware/Embedded Engineers and Technicians
Levels L4-L6

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ASIS is Australia's overseas secret intelligence collection agency. Its mission is to protect and promote Australia's vital interests through the provision of intelligence services as directed by the Australian Government. Its work can involve collecting intelligence relating to national security, international relations and economic issues. It also contributes to Australia's coordinated national efforts against terrorism, proliferation of weapons of mass destruction, and trans-national issues such as people smuggling.

ASIS employs people in a wide range of roles, including technologists. These roles require dynamic team players who enjoy working with stakeholders, team members and individually on projects. ASIS is looking for people who will be able to meet tight deadlines and work to support ASIS priorities. Sucessful candidates will have excellent coordination and administration skills, excellent verbal and written communication skills; and, strong stakeholder engagement and influencing skills. Relevant tertiary qualifications and demonstrable experience will be highly regarded.

ASIS values workplace diversity and is committed to providing a supportive, inclusive and respectful work environment. We encourage applications from Aboriginal and Torres Strait Islander People, women, people with disabilities, people that identify as LGBTIQ+ and people from culturally and linguistically diverse backgrounds.

We offer a competitive salary package including 22 days annual leave, shutdown between Christmas and New Year's Day, 15.4% employer superannuation contribution, access to flex time (up to Level 6 only) and generous paid parental leave. Full and part time positions as well as flexible work hours can be negotiated.

All positions are office-based and located in Canberra. **This role requires the successful applicant to obtain and maintain a Security Clearance.**

Role: Hardware/Embedded Engineers and Technicians (L4 – L6)

ASIS develops cutting edge technical systems for use in diverse environments. The capability development and engineering teams are looking to grow their next generation of hardware/embedded engineers and technicians in their rewarding and supporting environment. As a core part of a team developing end to end solutions to a variety of problems, ASIS needs people who contribute through all phases of the operational technology life cycle; from hardware design and low-level software/firmware systems through to manufacture. Hardware/embedded engineers and technicians also provide specialised advice to other groups on relevant and emerging technologies. Problem solving skills and a familiarity with industry best practise tools, techniques and technologies for current and emerging hardware systems are important for the role.

This is a unique opportunity to contribute to meaningful projects that combine the best of technology with exciting challenges. This role will provide you with exposure to a large number of technologies and tools, and great opportunity for growth. Opportunities for engagement with

partners across Australia and the world, and ongoing professional development will enable currency and continuous growth in the role.

Key Responsibilities and Tasks

- Contribute to systems level design by analysing the impacts of hardware and firmware on system design and performance
- Prototype and demonstrate hardware and firmware designs
- Design, implement and test embedded systems as part of a development team
- Apply best practice engineering and manufacturing processes
- Engage with software design practitioners to develop hardware/firmware systems
- Engage with customers and suppliers to understand the requirements and distil these to engineering activities
- Evaluate new tools and methodologies for improved hardware development and manufacturing
- Evaluate and understand how relevant emerging technologies can advance our outcomes
- Contribute to a development team as contributor to project outcomes

Core Skills / Education, qualification and experience requirements

We encourage you to apply if you have an interest, experience or passion in one or more of the following:

- CAD design
- Manufacturing and fabrication
- Electronic components and systems, firmware principles and hardware/software interfaces
- PCB layout (Altium preferred), PCB assembly and bring up of hardware systems
- Familiarity with microcontroller firmware processes, tools and architectures
- Understanding of low power design techniques including battery and firmware considerations
- Understanding of RF system design and relevance to wireless communications technologies
- Familiarity with the typical buses and interfaces used in embedded systems, including FPGA based interconnects
- Bachelors degree or trade qualifications in: engineering (electronic, mechanical or mechatronics), applied physics, or equivalent practical experience (including ongoing studies).

Experience in the following would be beneficial, but not essential:

- Processes and techniques for reliable embedded system design and test
- Experience with wireless communications techniques and communications systems analysis, including antenna design and characterisation
- Experience with ARM Cortex-M firmware in C
- Knowledge of Real Time Operating Systems for low power systems
- Be able to support analysis and design trade-offs using tools such as MATLAB or Python
- Experience through the full development system life cycle including system definition, development, testing, delivery and sustainment

- Hardware and low-level software reverse engineering techniques
- Project management, risk analysis, contract administration, structured testing and/or system design skills and experience will be highly regarded
- Understanding of code management and version control systems such as Git
- An interest in continuing development, opportunities identifying relevant technologies

Selection Criteria

Candidates are not required to provide a separate written response to the ILS capabilities (below), however, candidates are encouraged to consider the capabilities in preparing their application, as each candidate will be assessed on their ability to demonstrate behaviours aligned to the capabilities for the position.

For more information on the ILS, tips on applying for jobs in the Public Service, go to the APSC website found at www.apsc.gov.au.

Supports Strategic Direction

- Supports shared purpose and direction;
- Thinks strategically;
- Harnesses information and opportunities; and
- Shows judgment, intelligence and common sense.

Achieves Results

- Identifies and uses resources wisely;
- Applies and builds professional expertise;
- Responds positively to change; and
- Takes responsibility for managing work projects to achieve results.

Supports Productive Working Relationships

- Nurtures internal and external relationships;
- Listens to, understands and recognises the needs of others;
- Values individual differences and diversity; and
- Shares learning and supports other.

Displays Personal Drive and Integrity

- Demonstrates public service professionalism and probity;
- Engages with risk and shows personal courage;
- Commits to action;
- Promotes and adopts a positive and balanced approach to work; and
- Demonstrates self-awareness and a commitment to personal development.

Communicates with Influence

- Communicates clearly;
- Listens, understands and adapts to audience; and
- Negotiates confidently.

Job Specific Requirements

- Demonstrated experience and education relevant to the role.

HOW TO APPLY

Applicants will need to apply **ONLINE** via our website.

Applicants will required to attach a resume and submit a maximum 800 word pitch outlining their relevant experience, skills and knowledge to perform the duties of the role.

You will be asked what level you are applying for.

Applicants are encouraged to consider the capabilities when preparing their application, as this will form the basis of selection assessment. For more information and tips on applying for jobs in the Public Service, search 'Joining the APS' at www.apsc.gov.au.

After application submission, you may receive an SMS requesting you to complete online testing. Please ensure you complete this as your application will not be progressed otherwise.

APPLICATIONS CLOSE: Refer to date on website

ELIGIBILITY

Candidates must be Australian citizens.

The successful candidate will be required to obtain and maintain a security clearance.

REASONABLE ADJUSTMENTS

All requests for reasonable adjustments will be considered and managed in consultation with you. We will continue to ask you if you require reasonable adjustments at each stage of the process. If you are successful in gaining employment, reasonable adjustments can also be made available to you in performing your role.

WHAT HAPPENS NEXT?

You may receive a SMS requesting you to complete online testing. Please ensure you complete this as your application will not be progressed otherwise.

Please do not tell anyone about your application with our organisation at this stage of the process as doing so may harm your suitability for employment with us.

A merit list will be established for candidates who are suitable and will remain valid for a period of 18 months.

We thank you for the time and effort you have put into your application; however, we are unfortunately unable to provide feedback to unsuccessful candidates.