Sydney WATER

Job Profile

SCADA Configuration and Testing Engineer Level 3

Group: Finance Commercial and Digital

Job Summary

To be completed by People and Culture team			
Job Family	Information Technology	**Career Stage**	D
Job Function	Programming and Development	**Career Stream**	Professional
Coverage EA = Enterprise Agreement ICE = Individual Contract of Employment	EA	**Last Modified Date**	23/09/2026
To be completed by Manager ~ (Team Size relates to People Leadership)			
Work Environment	Hybrid	**Team Size**	
People Leader	No	**Indirect Team Size**	

Who we are

At Sydney Water, we exist for our customers. We're more than 3,500 people working together, striving to do more and be better—better for the environment, our customers, our people, and our water. Our people are passionate about working together, and driving agility, accountability, innovation, sustainability, and exceptional customer experiences.

Sydney Water is the main provider of water, wastewater, recycled water, and stormwater services in Greater Sydney. Our employees are dedicated to our customers, ensuring services are reliable and affordable, we are proactive and easy to engage with, forward-thinking, and environmentally focused.

Working with us means helping to provide essential services, safeguarding Sydney's future with a sustainable water supply, and protecting our iconic waterways. Our strategy guides our journey to enhance customer outcomes and continue delivering robust services to our city into the future.

Job Purpose

The purpose of this role is to participate in development of RTU/PLC/HMI software and testing for water and wastewater systems and to contribute in project co-ordination, review of electrical drawings, review scope of works and provide technical advice on issues related to control system software and its application to the water and wastewater systems. IICATS team responsible for the design, development, support, maintenance and refinement of IICATS/SCADA/IoT Control Systems and software, to achieve monitoring and control of Sydney Water assets in the water and wastewater systems.

Sydney WATER

Accountabilities

Job Specific	**Software Development:** • Testing of new routine RTU/PLC software additions to existing SCADA and IoT systems. • Diagnose faults with and make minor changes to existing RTU/PLC software. **SCADA system:** • Testing of new routine SCADA Human Machine Interface (HMI) and database configuration changes. • Diagnose minor configuration and database faults and carry out updates for sites. Resolve telecommunications failures **Process and Documentation:** • Utilise integrated change and software management systems. • Prepare test, commissioning and configuration documentation for water and wastewater sites. • Follow and develop new procedures for the configuration, testing and commissioning process. • Resolve technical SCADA issues of medium complexity on capital works projects. **Commissioning and Support:** • Review of Scope of works, Need Specifications, electrical and communication drawings for sites with minor variation to a standard site. • Assist Field Commissioning Engineers by reviewing alarms from site/remote location. • Resolve simple process failures associated with control systems. • Identify and resolve routine telemetry failures, which impact on the operation of the SCADA system. • Provide technical advice for online equipment failure. • Analyse the reliability, availability and performance of the telemetry systems. **Innovation:** • Assist in the implement new SCADA technologies to improve the asset performance. • Contribute to the continuous improvements of alternative strategies/processes to save asset life cycle cost.

Sydney WATER

Role Requirements

Education / Qualifications

Required	• Recognised degree or equivalent qualification in areas such as (but not limited to) Electrical, Electronics, Computer Science, Mechatronics or Control Engineering.
Desired	•

Certifications / Licences

Required	• This position has been designated as a Critical Worker role under the Security of Critical Infrastructure Act 2018 (SOCI Act). As such, the successful candidate must hold a current AusCheck background check clearance prior to appointment.
Desired	•

Experience

Required	• Experience with industry standard RTU/PLC programming languages, communication protocols and software development tools • Minimum of 2-3 years of demonstrable experience with SCADA systems, including HMI development. • Understanding and experience developing new and effective quality control procedures relating to SCADA system development • Well-developed communication skills, both written and oral and the ability to liaise with Sydney Water Corporation's personnel and external parties. • Demonstrated commitment to WHS and the principles of EEO
Desired	• Demonstrated experience in computer applications to process control • Knowledge of computer high level programming languages • Working knowledge of Water and Wastewater systems • Working knowledge of databases •

Sydney WATER

Capabilities and Skills

The capability and skill requirements for this role are identified in the skills profile listed below. This is comprised of Enterprise Capabilities, that are essential for all roles and functional skills, which are specific to each role.

Enterprise Capabilities (C-E)	
Capability	**Descriptor**
Accountability	Ensures that own actions and those of others are focused on achieving goals and owning the outcome, in a safe, inclusive collaborative way.
Agility	Adapts readily to change and encourages alternative views by using a range of interpersonal communication skills. Develops and coach's others while being aware of impact on others.
Innovation	Develops innovative outcomes to solve problems in ways that are not immediately evident and encourages new ideas and thinking in others.

Functional Skills			
Skill	**Priority**	**Essential or Desirable**	**Proficiency level**
Control Systems	1	Essential	Intermediate
Teamwork	2	Essential	Intermediate
Creative Problem-Solving	3	Essential	Intermediate
Business Writing	4	Essential	Intermediate
Programmable Logic Controllers	5	Essential	Intermediate
Human Machine Interfaces	6	Essential	Intermediate
Process Control	7	Desirable	Intermediate
Communications Protocols	8	Desirable	Intermediate
Integration Testing	9	Essential	Intermediate
System Configuration	10	Desirable	Intermediate

Proficiency Level Descriptors

Developing - Building practical experience, needs continued coaching.

Intermediate - Independent execution, minimal guidance**.**

Advanced - Fully independent execution, coaches' others.

Mastery - Strategic, sought as expert internally and externally.

Additional notes

Sydney Water takes the safe provision of its services to the public and the protection of its information assets extremely seriously. As a Sydney Water employee, you are required to understand your obligations under the Acceptable Use of Information Technology Policy and how Sydney Water's Information Technology is to be used. You must also help keep your workplace secure by ensuring you do not enable non-authorised people access to sites, maintain the integrity of locked entries and exits, and where appropriate, alarms being engaged.

Sydney Water requires all users to embrace and adhere to all enterprise and protective security policies, awareness programs and frameworks for Sydney Water assets.