



POSITION DESCRIPTION

Position Title:	Senior Controls Technician
Cluster / Business Unit / Division	Clayton Campus
Section or Unit:	Controls & Scientific Computing Group
Classification:	Band 4
Job Family	Engineering and Technical
Position Description Number:	PD-1852
Work Contract Type:	Technical
STEMM/NON-STEMM	STEMM

POSITION PURPOSE

The Senior Controls Technician is responsible for providing control system solutions that support the needs of the science teams through effective design, development, implementation, and support activities.

ORGANISATIONAL ENVIRONMENT

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific services and providing specialised advice to government, industry, academia and other research organisations.

The Australian Synchrotron (AS) is a division within the Australian Nuclear Science and Technology Organisation (ANSTO) and one of the nation's premier science facilities that provides a vibrant focal point for researchers from Australia, NZ and further afield. The facility provides world-leading technical capability that delivers better and faster experimental techniques that enhance current fundamental and applied research. The facility promotes international collaboration to enable leading-edge R&D that will greatly benefit Australia and our regional neighbours.

The Controls and Scientific Computing team is responsible for enabling world-class synchrotron tools to support the Australian Synchrotron in achieving its objectives. High performance solutions come through the effective interaction of Controls and Computing with the Synchrotron's Engineering and Science teams. Controls and Computing ensures it is world-class by collaborating with peers in large science facilities nationally and internationally. Controls and Computing develops standards and specifications and engages external suppliers to provide optimal solutions. Where an appropriate solution cannot be sourced, the team designs solutions in-house.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Provide operational support by trouble shooting, diagnosing and solving problems with the installed control systems in the facility.
- Plan, schedule and deliver work programs related to the upkeep and maintenance of control systems activities across the accelerator and beamlines to reduce downtime related to control systems.
- Participate and provide technical support on projects related to control systems to ensure timely delivery that meets expectations.
- Assist in the design, development and implementation activities related to control systems used on the accelerator and beamlines.

- Program, build or configure software that is used in the control systems using defined engineering processes and procedures to provide functional and reliable control systems that support, the needs of the facility.
- Perform test and integration activities for the software and hardware systems deployed in the facility to provide functional and reliable control systems that support, the needs of the facility
- Undertake additional duties as required and during period of leave of other staff.

Decision Making

This role makes decisions related to:

- Solving problems that have caused an immediate disruption to operations within their area of responsibility.
- Sequencing tasks to achieve the desired priorities of work assignments.
- Daily delivery of knowledge specific to their area of expertise
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

- Ensuring successful project completion whilst managing conflicting priorities and deadlines for different stakeholders including short lead times.
- Keeping abreast of recent developments in field, ensuring continual improvement and implementation of best practise
- Improving customer service, response times and delivery efficiencies
- Maintain effective relations and communication with clients, vendors, team members, engineers in other teams, and collaborators
- Ability to communicate across engineering and scientific disciplines. Interpret scientific requirements and translate them to a control system specification. Develop, apply and maintain standard solutions
- Provide solutions in a timely manner. Deployment of solutions is done during shutdown maintenance windows. Planning of work and your availability during these windows is essential

KEY RELATIONSHIPS

Who	Purpose
Internal	
Principal Engineers/Scientists/Group Leaders	<ul style="list-style-type: none"> • Weekly to discuss work assignments, progress, outcomes and provide advice on problem resolution
Mechanical/Electrical/Controls Engineers	<ul style="list-style-type: none"> • Weekly to work together on projects and provide advice on implementation of control systems as required
Scientists	<ul style="list-style-type: none"> • Weekly to discuss performance of control system and develop requirements for new systems
Procurement Department	<ul style="list-style-type: none"> • To liaise for procurement as required
External	
Specialist Contractors/Suppliers	<ul style="list-style-type: none"> • Monthly or as required to seek specialist services or advice or to

purchase specialist equipment

POSITION DIMENSIONS

Staff Data

Reporting Line	Reports to the Manager (discipline)
Direct Reports	Nil
Indirect Reports	Nil

Special / Physical Requirements

Location:	Clayton Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Labour intensive physical requirements (sitting, standing, frequent manual handling up to 20kg) Frequent movements (climbing, stooping, kneeling, crouching, crawling) Working in a loud environment Public speaking Working in confined space environment including wearing respiratory equipment
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions Perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements Shift work After hours work may be required for short and infrequent periods Required to participate on an on-call roster 24x7x365
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements Obtain and maintain appropriate federal government clearance

Workplace Health & Safety

Specific role/s as specified in AG-2362 of the ANSTO WHS Management System	All Workers Officer (definitions found in appendix 1 of AG-2362) Group Executive / General Manager Managers / Leaders / Supervisors Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties
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ORGANISATIONAL CHART

Ref published Organisation Chart

KNOWLEDGE, SKILLS AND EXPERIENCE

TAFE Diploma or equivalent technical qualification relating to Controls Engineering systems with demonstrated practical experience

Essential

1. At least 8 years demonstrated practical experience
2. Demonstrated experience designing and implementing distributed control systems.
3. Proven ability to program PLC based control systems.
4. Demonstrated understanding of data acquisition and real time control systems.
5. Demonstrated experience working effectively in a technical team.
6. Proven ability to follow engineering processes and procedures related to control systems.
7. Proven experience in troubleshooting automation and motion control systems.
8. Proven experience with tools used in fault finding and diagnosis.
9. Proven time management and communication skills.

Desirable

1. A TAFE qualification in electrical, electronic, mechatronics or instrumentation.
2. Experience in a science environment or light source facility
3. Advanced programming skills in PLCs, experience with safety systems.
4. Some experience with Instrumentation and PC based control systems.

VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position.

Line Manager		Delegated Authority	
Name:	Navid Hamedi	Name:	Paul Martin
Title:	Acting, Manager, PLC	Title:	Senior Manager, Controls & Scientific Computing
Signature:		Signature:	
Date:		Date:	