

CS77 SCADA Technician

Disclaimer

These Occupational Frameworks and Skill Profiles have been developed as workforce planning, occupational mapping and skills reference resources for the Australian textile, clothing and footwear (TCF) industry. They are intended to describe the typical functions, responsibilities, skills and capabilities associated with occupations across the industry.

These documents are not intended to replace or override industrial instruments or employment arrangements, including awards, enterprise agreements, employment contracts, position descriptions, classification structures, licensing or regulatory requirements, or other statutory obligations. Where differences arise, the relevant industrial, legislative or regulatory requirements take precedence. The Skill Profiles should be used as complementary reference documents to support workforce planning, career development, training and skills recognition.

1. Job role

TCF sub-sector	Cross sector
Job role	CS77 SCADA Technician
Job role description	Installs, monitors and maintains Supervisory Control and Data Acquisition (SCADA) systems used to control and optimise manufacturing processes across TCF operations. In the Australian TCF manufacturing industry, the SCADA Technician plays a critical role in supporting automated production environments, including textile processing, dyeing, finishing and material handling systems. The role involves configuring control systems, monitoring real-time data and ensuring system reliability. The technician works closely with production, engineering and IT teams to ensure seamless integration of digital control systems with plant operations, enabling data-driven decision-making and improved efficiency in modern manufacturing environments.
Performance expectations	• Maintaining reliable SCADA system operation. • Monitoring and optimising production processes through data. • Ensuring system uptime and rapid fault resolution. • Supporting automation and control system integration. • Maintaining accurate system documentation and configurations. • Ensuring cybersecurity and data integrity standards. • Supporting continuous improvement initiatives. • Following WHS and operational procedures.
Specialisation	SCADA configuration, PLC integration, industrial automation, data acquisition systems, process control optimisation.
Application in other TCF sectors	• Manufacturing and process industries. • Utilities and energy systems. • Water and wastewater treatment. • Mining and resources.

	Any automated industrial environment.
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2. Key tasks and critical work functions

Key tasks	- Monitoring SCADA systems and process data. - Configuring and updating SCADA interfaces. - Troubleshooting system faults and alarms. - Integrating SCADA with PLC and control systems. - Supporting system upgrades and maintenance. - Recording system performance and incidents. - Ensuring cybersecurity and data protection. - Supporting operators with system usage.
Critical work functions	- Ensuring continuous monitoring and control of production systems. - Maintaining system reliability and uptime. - Enabling data-driven operational decisions. - Preventing system failures and production disruptions. - Supporting integration of digital and physical systems. - Maintaining secure and compliant data systems. - Supporting automation and efficiency improvements.

3. Technical skills

SCADA systems	Operating and configuring SCADA platforms.
PLC integration	Working with programmable logic controllers.
Process control	Understanding automated manufacturing processes.
System troubleshooting	Diagnosing and resolving faults.
Data analysis	Interpreting real-time and historical data.
Networking basics	Understanding industrial communication systems.
Cybersecurity	Maintaining secure system environments.
Documentation	Maintaining system and configuration records.

4. Generic Skills

Analytical thinking	Interpreting system data and trends.
Problem solving	Resolving technical issues quickly.
Attention to detail	Ensuring system accuracy and reliability.
Communication	Working with operators and engineers.
Time management	Responding to system issues promptly.
Teamwork	Collaborating across technical teams.
Adaptability	Keeping up with evolving technologies.

5. Emerging skills

Emerging skills	• Integration with Industry 4.0 and IoT systems. • Advanced data analytics and predictive maintenance. • Cloud-based SCADA systems. • Cybersecurity for industrial control systems. • Digital twin and simulation technologies. • AI-driven process optimisation.
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6. VET Qualifications and Skill Sets

Entry-level preparation	UEE31225 Certificate III in Instrumentation and Control or equivalent.
Advanced development	UEE51020 Diploma of Instrumentation and Control Engineering or equivalent or bachelor's degree in engineering (mechatronics, electrical, automation) or industrial IT.

7. Job progression

Possible job progression	Technician / Electrician → SCADA Technician → Senior Automation Technician → Control Systems Engineer → Engineering Manager.
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8. Classification

Australian Qualifications Framework	Level 4-7.
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 2.
Open Source Classification of Occupations for Australia (OSCA)	313999 Engineering Technician nec.



Skills Insight is a Jobs and Skills Council funded by the Australian Government Department of Employment and Workplace Relations.