

CS77 SCADA Technician

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

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
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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
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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
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Advanced development	UEE51020 Diploma of Instrumentation and Control Engineering or equivalent or bachelor's degree in engineering (mechatronics, electrical, automation) or industrial IT
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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)	SCADA Technician / Automation Technician



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