Role Description
Principal Cyber Security Engineer

Role Description Fields	Details
Cluster	Education
Department/Agency	NSW Department of Education
Division/Branch/Unit	ITD
Role number	236785
Classification/Grade/Band	Clerk Grade 11/12
Senior executive work level standards	Not Applicable
ANZSCO Code	TBC
PCAT Code	TBC
Date of Approval	08 August 2023
Agency Website	https://www.education.nsw.gov.au/

Agency overview

The NSW Department of Education serves the community by providing world-class education for students of all ages. We ensure young children get the best start in life by supporting and regulating the early childhood education sector. We are the largest provider of public education in Australia with responsibility for delivering high-quality public education to two-thirds of the NSW student population. We are committed to fostering vibrant, sustainable and high-performing vocational and higher education sectors. We are responsible for enacting NSW Government policy, driving improvement in education, and overseeing policy, funding and compliance issues relating to non-government schools. We respect and value Aboriginal and Torres Strait Islander people as First Peoples of Australia.

Primary purpose of the role

The Principal Cyber Security Engineer is responsible for reviewing architectures and assessing and reporting on security risks for network and operational infrastructure, applications and cloud services.

Key accountabilities

- Identify key industry leading security technologies and practices to incorporate into architecture.
- Support the development of strategic partnerships across the department for the purpose of reinforcing a strong cyber security culture.
- Research security technology trends and standards and use this information to assist in the development of new products and services.
- Document and provide technical advice on cyber security to technical and business teams
- Support architecture and solution design teams to ensure that "secure-by-design digital architectures and solutions are developed.
- Contribute to the development of department-specific cyber security policies and standards

Key challenges

- Maintaining and applying contemporary cyber security knowledge to a wide field of technologies in a rapidly evolving cyber environment
- Managing competing demands within a complex and high-volume work environment

- Maintaining highly effective relationships across many different technical groups and business units with competing priorities

Key relationships

Internal

Who	Why
Cyber Security Teams	• Consult and collaborate with Cyber teams, propose solutions and take feedback.
All ITD teams	• Consult and collaborate with ITD teams, contribute to architectures, contribute to solution design and provide cyber security guidance.
All IT system owners across the department	• Provide advice on secure solutions and practices.

Role dimensions

Decision making

Exercises initiative and judgement in the prioritisation and delivery of work outputs and completion of regular tasks in accordance with NSW Government and Department of Education legislation, regulation and policies.

Reporting line

Manager, Cyber Response and Digital Forensics

Direct reports

Nil

Budget/Expenditure

Nil

Key knowledge and experience

- Demonstrated substantial knowledge of cyber security frameworks, standards and best practices.
- Demonstrated substantial experience with IP networking and operating systems security.
- Demonstrated substantial knowledge of penetration testing methodologies and techniques.
- Demonstrated substantial knowledge of application code security review methodologies and techniques.
- Demonstrated knowledge of DevSecOps methodologies and practices
- demonstrated substantial experience architecture, design and implementation of solutions in AWS and Azure.

Essential requirements

- Working With Children Check (WWCC) for paid employment.

Capabilities for the role

The NSW public sector capability framework describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial

responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.
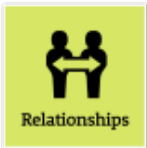
The capabilities are separated into focus capabilities and complementary capabilities

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

Focus capabilities

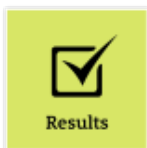| Capability group/sets	Capability name	Behavioural indicators	Level
Personal Attributes	**Display Resilience and Courage** Be open and honest, prepared to express your views, and willing to accept and commit to change	• Remain composed and calm and act constructively in highly pressured and unpredictable environments • Give frank, honest advice in response to strong contrary views • Accept criticism of own ideas and respond in a thoughtful and considered way • Welcome new challenges and persist in raising and working through novel and difficult issues • Develop effective strategies and show decisiveness in dealing with emotionally charged situations and difficult or controversial issues	Advanced
Relationships	**Communicate Effectively** Communicate clearly, actively listen to others, and respond with understanding and respect	• Present with credibility, engage diverse audiences and test levels of understanding • Translate technical and complex information clearly and concisely for diverse audiences • Create opportunities for others to contribute to discussion and debate • Contribute to and promote information sharing across the organisation • Manage complex communications that involve understanding and responding to multiple and divergent viewpoints • Explore creative ways to engage diverse audiences and communicate information • Adjust style and approach to optimise outcomes • Write fluently and persuasively in plain English and in a range of styles and formats	Advanced
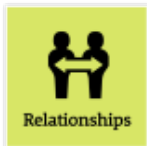
|	**Influence and Negotiate**	• Influence others with a fair and considered approach and present persuasive counter-arguments	Advanced
	Gain consensus and commitment from others, and resolve issues and conflicts	• Work towards mutually beneficial 'win-win' outcomes	
		• Show sensitivity and understanding in resolving acute and complex conflicts and differences	
		• Identify key stakeholders and gain their support in advance	
		• Establish a clear negotiation position based on research, a firm grasp of key issues, likely arguments, points of difference and areas for compromise	
		• Anticipate and minimise conflict within the organisation and with external stakeholders	
	Plan and Prioritise	• Understand the links between the business unit, organisation and the whole-of-government agenda	Advanced
	Plan to achieve priority outcomes and respond flexibly to changing circumstances	• Ensure business plan goals are clear and appropriate and include contingency provisions	
		• Monitor the progress of initiatives and make necessary adjustments	
		• Anticipate and assess the impact of changes, including government policy and economic conditions, on business plans and initiatives and respond appropriately	
		• Consider the implications of a wide range of complex issues and shift business priorities when necessary	
		• Undertake planning to help the organisation transition through change initiatives, and evaluate progress and outcomes to inform future planning	

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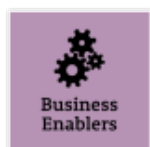GOVERNMENT
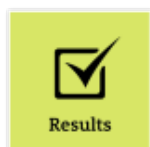
	Think and Solve Problems	• Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues	Advanced
	Think, analyse and consider the broader context to develop practical solutions	• Work through issues, weigh up alternatives and identify the most effective solutions in collaboration with others	
		• Take account of the wider business context when considering options to resolve issues	
		• Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements	
		• Implement systems and processes that are underpinned by high-quality research and analysis	
		• Look for opportunities to design innovative solutions to meet user needs and service demands	
		• Evaluate the performance and effectiveness of services, policies and programs against clear criteria	
	Technology	• Support research and expert advice on the application of emerging technologies to achieve organisational outcomes	Highly Advanced
	Understand and use available technologies to maximise efficiencies and effectiveness	• Ensure that effective governance frameworks are in place to efficiently and effectively apply technology within the organisation	
		• Establish effective governance to ensure organisational compliance with cyber security and acceptable use of technology policies	
		• Critically assess business cases supporting the introduction of technology to improve the organisation's efficiency and effectiveness	
		• Ensure that effective policy and procedures are in place for records, information and knowledge management to meet government and organisational requirements	

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

Capability group/sets	Capability name	Description	Level

Personal Attributes	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Adept
Personal Attributes	Manage Self	Show drive and motivation, an ability to self-reflect and a commitment to learning	Adept
Personal Attributes	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Adept
Relationships	Commit to Customer Service	Provide customer-focused services in line with public sector and organisational objectives	Adept
Relationships	Work Collaboratively	Collaborate with others and value their contribution	Advanced
Results	Deliver Results	Achieve results through the efficient use of resources and a commitment to quality outcomes	Foundational
Results	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Foundational
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
Business Enablers	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Adept
Business Enablers	Project Management	Understand and apply effective planning, coordination and control methods	Adept

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