

Role Description

Graduate Engineer



Cluster	Stronger Communities
Agency	NSW Police Force
Command/Business Unit	Forensic Evidence and Technical Services Command, Advanced Technology Centre
Location	Potts Hill
Classification/Grade/Band	Departmental Professional Officer Grade 2 (DPO 2)
ANZSCO Code	263212
PCAT Code	1226492
NSWPF Role Number	RD 1008
Date of Approval	04/12/2023
Agency Website	www.police.nsw.gov.au

Agency overview

The NSW Police Force (NSWPF) vision is for *A Safer New South Wales*, which is achieved by police working with the community to reduce violence, crime and fear.

It is one of the largest police forces in the western world, with more than 20,000 NSW Police Force employees, including more than 18,000 police officers providing a range of law and order services 24 hours a day, seven days a week to the socially, geographically and culturally diverse community of NSW.

The organisation has four function lines, based across a number of locations. Metropolitan Field Operations and Regional NSW Field Operations provide frontline services directly to the community. Investigations & Counter Terrorism provides investigative, technical and counter terrorism expertise. Corporate Services, provides business support services such as technology and communication, education and training and corporate human resources functions.

We are a proud employer of a diverse range of people that reflects the community of NSW, all who are committed to building a workplace that creates a sense of belonging and inclusion for all. The work is challenging and rewarding, and our employees meet and work alongside inspirational people sharing unique experiences and perspectives, all whilst making a difference to people's lives. From frontline policing to corporate careers, roles requiring specialist expertise and leadership roles, there are over 60 different career pathways to choose from and there are jobs for all capabilities, skills, goals, and interests.

The NSWPF serves our people and the community by modelling behaviours of respect, pride and trust in all that we do. The NSWPF *Statement of Values* and *Code of Conduct & Ethics* outlines appropriate behaviour for all NSW Police Force staff. All employees of NSWPF are expected to ensure ethics are incorporated into all aspects of their work making ethical behaviour, practices and decision making a part of daily routine. This further extends to ensuring confidentiality and information security is maintained at all times.

Work, Health and Safety legislation requires all employees to have specific responsibilities. This role is responsible for following all NSWPF health and safety policies, and taking all reasonable care that their actions or omissions do not impact on the health and safety of others.

Primary purpose of the role

The role is responsible for the research, design and develop electronic hardware, and software applications to support the operational activities of the Technical Evidence & Science Branch, Forensic Evidence & Technical Services Command.

Key accountabilities

- Assist senior engineers to support capability development across the technical surveillance domain by implementing new and innovative technologies
- Assess and analyse clients' issues and propose efficient and effective solutions in a timely manner
- Provide training and support to end users of solutions developed and or implemented to develop skills and knowledge of user base
- Draft and contribute to the development of technical specifications, training, and operational support documentation
- Work with manufacturers, vendors, and customers to understand project requirements and translate requirements into operational solutions to meet stakeholder expectations
- Ensure operational reliability of the solutions by implementing a thorough testing regime as required.

Key challenges

- Continue to develop new skills and build on existing skills to provide innovative use of materials, workshop machines, hardware, and commercial-off-the-shelf products.
- Critical analysis to enable improvement or integration of hardware and software solutions into existing products.

Key relationships

Who	Why
Internal*	
Manager/Team Leader	<ul style="list-style-type: none"> • Receive guidance and provide regular updates on key technical projects, issues, and priorities • Identify emerging issues/risks and their implications and propose solutions • Escalate issues, advise and receive instructions
Work Team	<ul style="list-style-type: none"> • Work collaboratively to contribute to achieving team outcomes
Clients/Customers	<ul style="list-style-type: none"> • Provide advice on technical issues • Resolve issues where possible and escalate where necessary • Information exchange
External	
Clients/Customers	<ul style="list-style-type: none"> • Provide advice on technical issues • Resolve issues where possible and escalate where necessary • Information exchange

Role dimensions

Decision making

The role has autonomy to make decisions about the day-to-day prioritisation of technical related functions in consultation with the direct supervisor if required.

Reporting line

- Manager – DPO 6
- Team Leader – DPO 4 / DPO 3

Direct reports

- Nil

Budget/Expenditure

- Nil

Key knowledge and experience

- Strong understanding of engineering fundamentals and ability to synthesise practical solutions to challenging problems.
- Proficient with object-oriented programming languages (Python or C++)

Essential requirements

- Obtain and maintain the requisite security clearances for this position.
- Tertiary qualifications in electrical / electronic / mechatronic engineering and eligibility for membership of Engineers Australia (EA).

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.

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework. They are important to identifying performance required for the role and development opportunities.

The complimentary capabilities for this role are shown on the following pages with an explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.





Occupation specific capabilities (Focus & Complementary)


Occupation specific capabilities exist for Human Resources, Finance, Procurement, Legal and IT (SFIA) role types. They show a progressive increase in complexity and do not necessarily correspond to grades.

These can be found on the [HR Intranet > Careers and deployment > Workforce planning > Role Description Library > Related documents > Capability Framework](#)

Capabilities Summary


The focus capabilities in all tables below (including Occupation Specific/SFIA) are in **bold**.

NSW Public Sector Capability Framework		
Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Foundational
	Act with Integrity	Intermediate
	Manage Self	Intermediate
	Value Diversity and Inclusion	Intermediate
 Relationships	Communicate Effectively	Intermediate
	Commit to Customer Service	Intermediate
	Work Collaboratively	Intermediate
	Influence and Negotiate	Foundational
 Results	Deliver Results	Intermediate
	Plan and Prioritise	Intermediate
	Think and Solve Problems	Intermediate
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Foundational
	Technology	Adept
	Procurement and Contract Management	Foundational
	Project Management	Foundational


Occupation specific capabilities (ICT)		
Capability Set	Category, Sub-category and Skill	Level and Code
 SFIA	Development and Implementation, Systems Development, Hardware Design	Level 4 - HWDE
	Development and Implementation, Systems Development, Real-Time Embedded Systems Development	Level 4 - RESD
	Strategy and Architecture, Strategy and Planning, Emerging Technology Monitoring	Level 5 - EMRG
	Strategy and Architecture, Advice and Guidance, Specialist Advice	Level 5 - TECH

 **SFIA**





NSW Government employees can access the ICT set through the [Skills Framework for the Information Age](#) Foundation website by registering as a corporate user via their NSW Government email address.

FOCUS CAPABILITIES			
Capability group/sets	Capability name	Behavioural indicators	Level
 Personal Attributes	Manage Self Show drive and motivation, an ability to self-reflect and a commitment to learning	<ul style="list-style-type: none"> Adapt existing skills to new situations Show commitment to achieving work goals Show awareness of own strengths and areas for growth, and develop and apply new skills Seek feedback from colleagues and stakeholders Stay motivated when tasks become difficult 	Intermediate
	Commit to Customer Service Provide customer-focused services in line with public sector and organisational objectives	<ul style="list-style-type: none"> Focus on providing a positive customer experience Support a customer-focused culture in the organisation Demonstrate a thorough knowledge of the services provided and relay this knowledge to customers Identify and respond quickly to customer needs Consider customer service requirements and develop solutions to meet needs Resolve complex customer issues and needs Cooperate across work areas to improve outcomes for customers 	Intermediate
	Work Collaboratively Collaborate with others and value their contribution	<ul style="list-style-type: none"> Build a supportive and cooperative team environment Share information and learning across teams Acknowledge outcomes that were achieved by effective collaboration Engage other teams and units to share information and jointly solve issues and problems Support others in challenging situations Use collaboration tools, including digital technologies, to work with others 	Intermediate
 Results	Think and Solve Problems Think, analyse and consider the broader context to develop practical solutions	<ul style="list-style-type: none"> Identify the facts and type of data needed to understand a problem or explore an opportunity Research and analyse information to make recommendations based on relevant evidence Identify issues that may hinder the completion of tasks and find appropriate solutions Be willing to seek input from others and share own ideas to achieve best outcomes Generate ideas and identify ways to improve systems and processes to meet user needs 	Intermediate

FOCUS CAPABILITIES

Capability group/sets	Capability name	Behavioural indicators	Level
 Business Enablers	Technology		Adept
	Understand and use available technologies to maximise efficiencies and effectiveness	<ul style="list-style-type: none"> Identify opportunities to use a broad range of technologies to collaborate Monitor compliance with cyber security and the use of technology policies Identify ways to maximise the value of available technology to achieve business strategies and outcomes Monitor compliance with the organisation's records, information and knowledge management requirements 	

COMPLEMENTARY CAPABILITIES

Capability group/sets	Capability name	Description	Level
 Personal Attributes	Display Resilience and Courage	Be open and honest, prepared to express your views, and willing to accept and commit to change	Foundational
	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Intermediate
	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Intermediate
 Relationships	Communicate Effectively	Communicate clearly, actively listen to others, and respond with understanding and respect	Intermediate
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Foundational
 Results	Deliver Results	Achieve results through the efficient use of resources and a commitment to quality outcomes	Intermediate
	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Intermediate
	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Intermediate
 Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Foundational
	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Foundational
	Project Management	Understand and apply effective planning, coordination and control methods	Foundational

Occupation specific capability set (Skills Framework for the Information Age – SFIA)

Category, Sub-category	Skill and Level Description	Level and Code
Development and Implementation, Installation and Integration	Hardware Design Designs hardware components, taking account of target environment, performance, security, safety, reliability and sustainability requirements.	Level 4 - HWDE
	Translates logical designs into physical designs and delivers technical prototypes of proposed components for approval and production.	
	Designs the tests to measure the performance of prototypes and production output against specification and inform iterative development.	
Development and Implementation, Systems Development	Real-Time Embedded Systems Development Designs, builds and integrates complex real-time/embedded components and sub-systems.	Level 4 - RESD
	Designs physical layouts that reflect the connection between system components to test and optimise performance.	
	Builds system prototypes and simulations to aid development and enable debugging, testing and troubleshooting of embedded software.	
	Applies a range of approaches to the validation, verification and testing of real-time components and sub-systems. Is fully familiar with a range of specialist tools.	



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Version Control

Version	Summary of Changes	Date
V1.0	New Role Description (Replace PD 16-006 Departmental Professional Officer Grade 2)	04.10.2023

Roles attached

Position Number	Region	Position Number	Region	Position Number	Region	Position Number	Region
50258391	FETSC						