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Sub-major Group

27 ICT Professionals

OSCA - Occupation Standard Classification for Australia

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27 ICT Professionals

Perform analytical, conceptual and practical tasks that support the efficient and secure provision of ICT services to government, commercial and industrial organisations, and individuals.

OSCA skill level

The occupations in this sub-major group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Minor Group

271 Cyber Security Professionals and Database and Systems Administrators

Design, develop, install, test and maintain cyber security and database standards, guidelines, software and systems.

OSCA skill level

The occupations in this minor group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Unit Group

2711 Cyber Security Professionals

Develop and implement cyber security standards and guidelines, develop and install cyber security software and systems, conduct risk and security control assessments, analyse and address vulnerabilities in digital infrastructure, and respond to cyber security incidents.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

271131 Cyber Governance Risk and Compliance Specialist

Leads the governance, risk and compliance for cyber security.

Skill level: 1

Main tasks

- Develops, implements and measures cyber security policies, procedures and guidelines to comply with regulatory requirements and industry best practices
- Manages a risk management program, including risk assessments, risk mitigation plans and risk reporting
- Conducts regular security audits to identify potential security gaps and areas for improvement
- Provides guidance and training to employees on cyber security awareness, best practices and incident response procedures
- Develops and defines system classification requirements to ensure implementation of security controls and risk mitigation efforts are prioritised
- Conducts compliance assessments to ensure that regulatory and legal requirements related to cyber security are being met

Occupation

271132 Cyber Security Advice and Assessment Specialist

Conducts risk and security control assessments, interprets security policies, contributes to the development of standards and guidelines, reviews information system designs, provides guidance on security strategies to manage identified risks, provides specialist advice and explains systems security, strengths and weaknesses.

Alternative titles

- Cyber Security Adviser
- Cyber Security Consultant
- ICT Security Adviser
- ICT Security Consultant

Skill level: 1

Main tasks

- Conducts risk and security control assessments and vulnerability testing to identify potential security risks and weaknesses in an organisation's cyber security policies
- Provides specialist advice and guidance on security strategies to manage identified risks and vulnerabilities
- Develops and implements security policies, procedures, and standards and guidelines to help organisations maintain a strong security position
- Undertakes investigations and reports on security incidents, and guides the refinement of practices and processes that increase the detection of security related incidents
- Assists in root cause analysis of security incidents and breaches to determine the extent of the damage, and recommend remedial actions
- Develops metrics to highlight the impact of cyber security risks on business processes and information assets
- Aligns and coordinates internal and external audit activities and security assessment engagements

Occupation

271133 Cyber Security Analyst

Analyses and assesses vulnerability in infrastructure (software, hardware and networks), investigates available tools and countermeasures to remedy detected vulnerabilities, and recommends solutions and best practices. Analyses and assesses damage to

data/infrastructure as a result of security incidents, examines available recovery tools and processes, and recommends solutions.

Alternative titles

- ICT Security Analyst
- Information Security Analyst

Specialisations

- Cyber Security Researcher or Vulnerability Researcher
- Cyber Security Vulnerability Assessor
- Cyber Threat Analyst
- Malware Analyst

Skill level: 1

Main tasks

- Performs assessments on systems, networks and applications to identify and prioritise potential security risks
- Coordinates, analyses and investigates security risk incidents and breaches to determine the root cause, and develops mitigation controls and strategies
- Conducts research on cyber threats and weaknesses to develop and maintain knowledge of the cyber threat landscape
- Develops and executes threat intelligence strategies for future threats and protects against potential attacks
- Conducts risk assessments to identify security loopholes and weaknesses in IT systems
- Conducts malware analysis to identify and mitigate potential threats to systems and networks
- Analyses alerts and data from security products, web proxies, network security devices, and vulnerable scan and management systems

Occupation

271134 Cyber Security Architect

Designs a security system or major components of a security system, and may head a security design team building a new security system.

Alternative titles

- Enterprise Security Architect
- ICT Security Architect

Skill level: 1

Main tasks

- Develops and implements cyber security strategy and architecture
- Designs and maintains security controls and processes to protect systems, networks and data
- Reviews system security measures, and recommends and implements enhancements
- Collaborates with other ICT and business departments to align security measures with security standards, policies and regulations
- Stays updated on cyber security threats, and recommends new security technology and strategy improvements
- Implements new cyber security solutions and technologies
- Provides guidance to ICT staff on security best practices
- Develops and maintains cyber security reference architecture for consistent security controls
- Implements incident response and disaster recovery plans

Occupation

271135 Cyber Security Engineer

Designs, develops, modifies, documents, tests, implements, installs and supports cyber security software applications and systems to ensure they are fully integrated.

Alternative titles

- ICT Security Engineer
- Information Security Engineer

Skill level: 1

Main tasks

- Develops, implements and integrates secure coding practices, and conducts security testing and vulnerability assessments for software and systems
- Collaborates with developers to identify and remediate security issues
- Develops and implements secure software development lifecycle processes and methodologies
- Integrates security controls into development processes
- Participates in code reviews and provides security guidance
- Assesses security of third-party software components and libraries used in software and applications

- Develops and implements secure application programming interfaces and libraries for use in software and applications
- Performs code analysis scan on software binaries

Occupation

271136 Cyber Security Operations Coordinator

Leads the coordination and response to complex cyber security incidents and hunt investigations, manages tasks across various teams for incident response and hunt operations, advises leadership on current operational collaborations, contributes toward strategic planning, facilitates incident response engagements, and assesses technical information to develop key messaging.

Alternative titles

- Cyber Security Operations Manager
- ICT Security Administrator

Specialisation

- Cyber Security Incident Responder

Skill level: 1

Main tasks

- Leads the investigation and response to cyber security incidents and hunts, including containment, mitigation and recovery activities
- Analyses security risks and vulnerabilities, and implements security plans
- Performs threat management and modelling to identify threat vectors and develop cases for security modelling
- Coordinates with other teams to maintain the security of systems and information
- Assists in security awareness training for staff
- Manages the collection, preservation and analysis of forensic evidence
- Implements technical controls that align with security strategies and security architecture

Occupation

271137 Penetration Tester

Creates test cases using in-depth technical analysis of risks and typical vulnerabilities, and produces test scripts, materials and packs to test new and existing software or services. Plans, coordinates and conducts cyber threat emulation activities in support of certification, accreditation and operational priorities to verify deficiencies in technical security controls.

Alternative title

- Ethical Hacker

Skill level: 1

Main tasks

- Develops and executes penetration testing methodologies and strategies to identify weaknesses in security controls
- Creates test cases using in-depth technical analysis of risks and typical vulnerabilities
- Produces test scripts, materials and packs to test new and existing software or services for vulnerabilities
- Plans, coordinates and conducts cyber threat emulation activities to verify deficiencies in technical security controls, and provides recommendations for remediation
- Identifies vulnerability exploitations and potential attack vectors into a system, and analyses vulnerability scan results to assess security loopholes and threats
- May conduct phishing attacks or other tests to evaluate the effectiveness of security awareness training

Unit Group

2712 Database and Systems Administrators

Design, develop, install and maintain operating systems, software and server hardware to support secure and reliable database management systems.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

271231 Database Administrator

Plans, designs, configures, maintains and supports an organisation's database management system in accordance with user requirements, ensuring optimal database integrity, security,

backup, reliability and performance.

Database developers are excluded from this occupation. Database developers are included in Occupation 273333 Software Engineer.

Alternative titles

- DBA
- ICT Database Manager

Specialisation

- ICT Database Analyst

Skill level: 1

Main tasks

- Designs and implements database structures to optimise system performance and data storage efficiency
- Monitors and optimises database performance using various techniques such as indexing and fine-tuning queries
- Implements and maintains security protocols to protect databases from unauthorised access or breaches
- Performs regular data backups and recovery tasks to ensure data integrity and availability
- Coordinates database updates and migrations, including database software installation, configuration and patch management
- Develops disaster recovery plans to protect data from any potential loss or corruption

Occupation

271232 Systems Administrator

Plans, develops, installs, troubleshoots, maintains and supports an operating system and associated server hardware, software and databases, ensuring optimum system integrity, security, backup and performance.

Alternative title

- ICT Systems Manager

Skill level: 1

Main tasks

- Installs, configures and maintains server hardware, software, operating systems and databases infrastructure

- Diagnoses and resolves hardware, software and network connectivity issues to ensure uninterrupted system operation
- Conducts regular system backups and recovery procedures, ensuring data safety and integrity
- Facilitates IT infrastructure changes through change management processes, in accordance with organisational protocols
- Provides system related technical support and guidance to end users
- Manages user accounts, permissions and security policies to ensure data security and compliance with regulations

Minor Group

272 ICT Network and Testing Professionals

Research, analyse, plan, design, install, monitor, test and maintain ICT and telecommunications systems and networks to support the needs of organisations and individuals.

OSCA skill level

The occupations in this minor group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Unit Group

2721 ICT Network Professionals

Analyse and recommend strategies for network architecture and development, implement, manage, maintain and configure network hardware and software, monitor and optimise network performance, and troubleshoot and provide user support.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

272131 ICT Network and Systems Engineer

Designs, implements, monitors and maintains computer networks, systems and infrastructure, and takes responsibility for configuration, installation and maintenance of computer hardware and software. Develops, documents and implements project plans and procedures, including for network security. Develops testing procedures, performs audits on computer hardware, software, networks, systems and infrastructure, and provides technical support where required.

Cloud Engineers and Network Architects are excluded from this occupation. Cloud Engineers are included in Occupation 273331 Cloud Engineer. Network Architects are included in Occupation 272133 Network Architect.

Specialisations

- ICT Infrastructure Engineer
- ICT Network Engineer
- ICT Systems Integrator
- Network Analyst

Skill level: 1

Main tasks

- Builds, implements, monitors and maintains computer networks and systems
- Researches, analyses, manages and monitors network infrastructure
- Ensures the ongoing performance of networks and systems
- Develops and modifies software and network programs through use of programming code
- Configures, installs and maintains computer hardware and software
- Develops and documents project plans and procedures regarding system configuration, incident resolutions, and system and network maintenance
- Plans, develops and implements network security measures, policies and procedures
- Develops testing procedures and audits computer hardware, software, networks and systems
- Provides technical support to resolve computer network and system issues

Occupation

272132 Network Administrator

Installs and maintains hardware and software, implements, monitors and optimises network environments and infrastructure, documents diagnosis and resolution of network-

related incidents, manages network security, and attends to other operational tasks. May also perform tasks such as help desk technical support and user training.

Alternative titles

- Network Specialist
- Network Support

Skill level: 1

Main tasks

- Monitors, maintains and optimises network environments and infrastructure
- Coordinates, installs and maintains computer software and hardware
- Implements, maintains, improves and audits security measures to ensure network security
- Troubleshoots and provides technical support for network-related incidents
- Reviews and updates policies, procedures and documentation relating to network design, infrastructure and security
- Coordinates backup management of all local resources to prevent loss of information

Occupation

272133 Network Architect

Designs, plans, implements and optimises network infrastructure. Develops and maintains network-related documentation, collaborates with clients to create network designs, evaluates network hardware and software for selection, and drives automation of network processes. May also engage in resolution of critical network incidents.

Network Analysts are excluded from this occupation. Network Analysts are included in Occupation 272131 ICT Network and Systems Engineer.

Alternative title

- Network Designer

Skill level: 1

Main tasks

- Designs, plans, implements and optimises network architecture and infrastructure to align with business requirements and to meet specified operational parameters for capacity and performance
- Designs, reviews and implements network access and security technologies

- Considers network-related risks and specifies recovery routines and contingency procedures
- Develops and maintains network documentation, including network diagrams and capabilities
- Collaborates with clients to create network designs and test plans
- Evaluates and selects network hardware and software
- Drives automation of network-related processes
- May resolve critical network incidents

Unit Group

2722 ICT Quality Engineers and Test Analysts

Develop procedures and strategies to support, create, maintain and manage technical quality assurance processes, guidelines and systems infrastructure, investigate, analyse and resolve system problems and performance issues, and test the behaviour, functionality and integrity of systems.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

272231 ICT Quality Assurance Engineer

Creates, maintains and manages technical quality assurance processes and procedures to assess efficiency, validity, value and functional performance of computer systems and environments. Audits systems to ensure compliance with accredited internal and external industry quality standards and regulations.

Alternative titles

- Quality Analyst (ICT)
- Quality Manager (ICT)
- Quality Specialist (ICT)

Specialisations

- IT Auditor
- Management Systems Auditor (ICT)

- Systems Auditor (ICT)

Skill level: 1

Main tasks

- Develops and implements quality assurance plans, policies, standards and procedures for ICT systems, software and environments
- Conducts ICT system audits and assessments to identify non-compliance with quality assurance standards, regulatory requirements and accreditation standards
- Creates and oversees manual and automated tests of software and systems
- Develops corrective actions and improvement plans to address quality issues or non-compliance
- Coordinates and collaborates with cross-functional teams to ensure consistent application of quality assurance processes and procedures
- May supervise the work of ICT quality assurance teams

Occupation

272232 ICT Support Engineer

Develops support procedures and strategies for systems, networks, operating systems and applications development. Solves problems and provides technical expertise and direction in support of system infrastructure and process improvements, and diagnoses and resolves complex system problems.

Alternative title

- Support Analyst

Skill level: 1

Main tasks

- Diagnoses and resolves technical problems related to hardware, software, networks and systems
- Prioritises and triages incoming incidents and service requests to ensure timely response and escalation
- Diagnoses functionality errors and faults in systems and programming code to ensure systems perform to specification
- Develops, conducts and provides technical guidance and training in application software and operational procedures
- Performs system reviews and assessments, and recommends hardware and software strategies and directions

Occupation

272233 ICT Test Analyst

Specifies, develops and executes test plans and test scripts, produces test cases, carries out testing using various techniques, and documents the results of tests in defect reports and related documentation. Uses automated test software applications to test the behaviour, functionality and integrity of ICT software and systems.

Analysts testing technical security controls are excluded from this occupation. Analysts testing technical security controls are included in Occupation 271137 Penetration Tester.

Specialisations

- Automation Test Engineer
- Software Tester
- Systems Test Engineer (ICT)

Skill level: 1

Main tasks

- Tests, identifies and diagnoses functionality errors and faults in software and/or systems
- Defines user acceptance scenarios based on business requirements
- Develops test plans outlining strategy, scope, resources and timelines for testing software and/or systems
- Develops test cases describing the input, execution conditions and expected output of systems to examine functionality
- Creates and maintains test documentation such as procedural and operational manuals, as well as test cases and test reports
- Conducts unit, integration and functional testing to ensure software meets requirements
- Tests software across different platforms, browsers, operating systems and devices
- Provides feedback and recommendations based on analysis of test results, and ensures it aligns with business requirements and specifications
- May automate software and/or system test cases using testing tools and frameworks
- May undertake system performance, load and stress testing

Unit Group

2723 Telecommunications Engineers

Plan, design, develop and monitor telecommunication systems, networks, devices and broadcasting equipment.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

272331 Telecommunications Engineer

Plans, designs, develops and monitors telecommunication systems, networks, devices and broadcasting equipment.

Alternative title

- Telecommunications Network Engineer

Skill level: 1

Main tasks

- Designs and develops telecommunications products, systems and networks
- Monitors and maintains the performance of complex telecommunication products, networks and systems
- Tests and evaluates telecommunications products, systems and networks to ensure functionality, performance and emergency contingency planning
- Provides technical support and troubleshooting for telecommunication products, systems and networks
- Develops and implements system and network security measures, and ensures compliance with regulations and legislation

Minor Group

273 ICT Programmers, Analysts, Architects and Engineers

Design, develop and maintain digital games, websites, ICT systems, cloud infrastructure and software applications, review and modify processes and methods, and communicate with users to ensure their needs are met.

Cyber Security Architects, Cyber Security Engineers, Data Architects and Data Engineers are excluded from this minor group. Cyber Security Architects and Cyber Security Engineers are

included in Unit Group 2711 Cyber Security Professionals. Data Architects and Data Engineers are included in Unit Group 2232 Data Professionals.

OSCA skill level

The occupations in this minor group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Unit Group

2731 Digital Game and Web Developers

Plan, develop, transform and maintain digital games and websites.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

273131 Digital Game Developer

Develops and transforms digital games from a concept to an interactive product using coding, software programming, sound effects, rendering and testing.

Alternative title

- Video Game Developer

Specialisation

- Digital Game Designer

Skill level: 1

Main tasks

- Develops and creates game ideas and translates creative concepts into functional digital game prototypes
- Writes code using programming languages to implement game mechanics, user interfaces and interactive elements

- Creates menus, buttons and interactive elements that enhance player navigation and engagement
- Ensures that the games are compatible with various operating systems, platforms and devices, including desktops, laptops, consoles, interactive headsets, tablets and smartphones
- Optimises games for performance, addressing issues, such as loading times, frame rates and memory usage
- Conducts testing to identify and fix bugs, glitches and gameplay issues
- May design and oversee the implementation of game systems, mechanics and features

Occupation

273132 Web Developer

Plans, produces and maintains websites using web programming languages, software applications, technologies and databases together with specifications of user needs, often in conjunction with other ICT Professionals such as ICT Business Analysts, Web Designers and network and usability specialists.

Full stack developers are excluded from this occupation. Full stack developers are included in Occupation 273333 Software Engineer.

Alternative title

- Web Programmer

Skill level: 1

Main tasks

- Designs, develops and maintains websites using various programming languages
- Collaborates with other ICT Professionals to plan and produce websites that meet user needs and requirements
- Builds responsive and accessible websites that comply with web accessibility guidelines
- Uses content management systems to manage website content and data
- Ensures websites are optimised for performance, security and compatibility with different devices and browsers
- Develops and tests code to ensure that it meets industry standards, is properly structured, and is compatible with different platforms and operating systems
- Creates and manages databases to support the functionality of web applications and websites
- Designs and develops web applications such as online forms and e-commerce platforms, that provide value to users

- Creates and updates website content such as text, images and multimedia

Unit Group

2732 ICT Business and Systems Analysts and Architects

Design, develop, manage and evaluate ICT systems and software solutions, processes, methods and cloud infrastructure, and communicate with users to ensure outcomes meet their needs.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

273231 Cloud Architect

Designs, develops and manages scalable, reliable and secure cloud infrastructure for an organisation.

Alternative titles

- Cloud Infrastructure Architect
- Cloud Solution Architect

Skill level: 1

Main tasks

- Defines the cloud architecture blueprints to meet business objectives
- Considers security implications and incorporates security best practice into cloud infrastructure
- Assesses and recommends cloud platforms and technologies
- Conducts capacity planning and resource allocation for cloud infrastructure
- Manages cloud infrastructure migration projects
- Implements and manages cloud-based disaster recovery and business continuity plans

Occupation

273232 ICT Business Analyst

Identifies and communicates with users to formulate and produce a requirements specification to create system and software solutions.

Business analysts (non-ICT) are excluded from this occupation. Business analysts (non- ICT) are included in Occupation 223432 Management Consultant.

Alternative titles

- ICT BA
- ICT Business Consultant

Specialisation

- ICT Business Systems Analyst

Skill level: 1

Main tasks

- Gathers requirements from stakeholders to define business, technical and functional needs and specifications of a project
- Analyses and interprets data to understand trends to inform ICT systems decisions
- Maps business processes and systems using techniques such as business process modelling
- Evaluates risks associated with ICT initiatives and recommends mitigations
- Creates functional and technical specifications, use cases and workflow diagrams to communicate requirements
- Develops and implements training programs for users, and provides support to ensure effective use of ICT systems

Occupation

273233 Solution Architect

Designs and coordinates the implementation of end-to-end technology solutions to meet business outcomes. Ensures the solution has technological compatibility, efficiency and scalability.

Cloud solution architects are excluded from this occupation. Cloud solution architects are included in Occupation 273231 Cloud Architect.

Alternative title

- Technical Architect

Skill level: 1**Main tasks**

- Designs and develops scalable, efficient, secure and cost-effective technical solutions to meet business infrastructure or functional needs
- Researches and selects appropriate technologies, platforms and tools that best meet the project's requirements
- Defines the interfaces and data flows between different systems and third-party services so that each component works together
- Creates technical documentation, architectural diagrams and specifications to guide development teams and communicate the solution architecture
- Coordinates teams during the implementation of the chosen solution, addresses technical challenges, and oversees that the designs are effectively realised

Occupation

273234 Systems Analyst

Evaluates processes and methods used in existing ICT systems and proposes modifications, additional system components or new systems to meet user needs as expressed in specifications and other documentation.

Skill level: 1**Main tasks**

- Analyses existing business processes and systems to identify issues, errors and areas for improvement
- Collaborates with stakeholders to determine system requirements
- Creates functional solutions and system test plans to meet quality expectations
- Develops functional specifications for use by system developers
- Tests and troubleshoots system changes

Unit Group

2733 Software and Applications Engineers

Design, build and maintain software applications and cloud-based services, and facilitate collaboration and integration across different specialist ICT teams.

Cyber Security Engineers and Digital Game Developers are excluded from this unit group.

Cyber Security Engineers are included in Occupation 271135 Cyber Security Engineer. Digital Game Developers are included in Occupation 273131 Digital Game Developer.

OSCA skill level

The occupations in this unit group have a skill level corresponding to the qualifications and experience below.

- Skill Level 1: Bachelor Degree, higher qualification, or at least five years of relevant experience

Occupation

273331 Cloud Engineer

Builds, supports, manages and maintains cloud-based solutions and services, including cloud-based processes, applications, storage and computer networks.

Skill level: 1

Main tasks

- Deploys, configures and automates cloud services
- Creates, tests and implements cloud-based functions and applications
- Monitors and manages cloud resources and performance to ensure they are meeting production goals
- Troubleshoots issues with cloud-based solutions and services, and implements enhancements and fixes when necessary
- Ensures that cloud infrastructure and services meet security and compliance requirements by implementing security controls, managing access and authentication, and monitoring for security threats
- May plan and implement the migration of data and other information to the cloud

Occupation

273332 DevOps Engineer

Facilitates and undertakes communication, collaboration, integration and automation to improve efficiency and workflow across different specialist IT teams.

Cloud Engineers are excluded from this occupation. Cloud Engineers are included in Occupation 273331 Cloud Engineer.

Skill level: 1

Main tasks

- Leads and coordinates software development and operations, including continuous integration, continuous delivery, code deployment and system automation

- Promotes collaboration between development teams and operations teams
- Deploys applications or updates systems to ensure uniformity between networks, servers and automation elements within a given environment
- Automates software and infrastructure deployment using automation tools to improve the software development life cycle
- Implements and manages containerisation technologies
- Conducts performance testing and tuning to optimise the performance and stability of operational infrastructure
- Automates security testing and vulnerability scanning across the entire software development lifecycle

Occupation

273333 Software Engineer

Designs, develops, modifies, documents, tests and maintains software applications and systems using programming languages and development tools.

Cyber Security Engineers and Digital Game Developers are excluded from this occupation.

Cyber Security Engineers are included in Occupation 271135 Cyber Security Engineer. Digital Game Developers are included in Occupation 273131 Digital Game Developer.

Alternative titles

- Analyst Programmer
- Developer Programmer
- Software Developer

Specialisations

- Application Developer
- Application Engineer
- Artificial Intelligence Engineer
- Blockchain Developer
- Cloud Developer
- Computer Programmer
- Database Developer
- Full Stack Developer
- IT Security Developer
- Machine Learning Engineer
- Software Architect

Skill level: 1

Main tasks

- Designs and implements software architectures to solve complex technical issues in alignment with specified requirements
- Writes, tests and debugs code to ensure functionality, efficiency and adherence to quality accredited standards
- Performs code reviews and optimises algorithms to ensure software quality, maintainability and adherence to best practices
- Implements and manages software development processes and tools
- Identifies, assesses and mitigates potential risks throughout software development
- Collaborates with cross-functional teams to integrate software solutions within broader system infrastructures
- Documents software designs, workflows and user manuals to guide stakeholders and end-users