



Updating ANZSCO

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List of ANZSCO Occupations in Computer System Design and Related Service

Consultation round 1, 1 Feb 2023 - 28 Apr 2023

This is the list of ANZSCO Occupations in scope of the focus area 'Computer system design and related services'.

The focus area broadly covers occupations that require specialised knowledge and skills to:

- plan, organise, direct and coordinate the acquisition, development, maintenance, quality assurance and use of computer systems, database management systems, operating systems or information and communications technology (ICT) security policies and procedures
- analyse information and data to produce intelligence to guide government and commercial operations
- manage client accounts and represent companies in selling a range of ICT goods and services
- create computer animation, audio, video and graphic image files for various mediums, including games, motion pictures and the web
- plan, produce and maintain websites, computer infrastructure and web applications and technology
- design, test, maintain and document program code in accordance with user requirements and system specifications
- recommend strategies for network architecture and development or manage network hardware and software performance.

The comprehensive review includes occupations recently updated in 2021 and 2022 so that we can apply conceptual consistency across the classification.

Only occupations relevant to the focus area are included. These are listed by their current hierarchical categories in ANZSCO.

This information is from the latest version of ANZSCO, the Australian Update, 2022

[Browse Classification | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au)



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Major group – 1 Managers | Sub-major Group – 13 Specialist Managers | Minor Group – 135 ICT Managers | Unit Group – 1351 ICT Managers

Code	Title	Skill Level	Specialisations	Description
135111	Chief Information Officer Chief Technology Officer	1	Chief Information Security Officer	Plans, organises, directs, controls and coordinates the ICT strategies, plans and operations of an organisation to ensure the ICT infrastructure supports the organisation's overall operations and priorities.
135112	ICT Project Manager	1	ICT Development Manager ICT Security Project Manager	Plans, organises, directs, controls and coordinates quality accredited ICT and cyber security projects. Accountable for day-to-day operations of resourcing, scheduling, prioritisation and task coordination, and meeting project milestones, objectives and deliverables within agreed timeframes and budgets.
135199	ICT Managers nec	1		This occupation group covers ICT Managers not elsewhere classified. Occupations in this group include: <ul style="list-style-type: none">• IT Service Delivery Manager• Network Manager



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Major group – 2 Professionals | Sub-major Group – 22 Business, Human Resources and Marketing Professionals | Minor Group – 224 Information and Organisation Professionals | Unit Group – 2244 Intelligence and Policy Analysts

Code	Title	Skill Level	Specialisations	Description
224411	Intelligence Officer	1	Criminal Intelligence Analyst Defence Intelligence Analyst	Collects and analyses information and data to produce intelligence for an organisation to support planning, operations and human resource functions.





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Major group – 2 Professionals | Sub-major Group – 22 Business, Human Resource and Marketing Professionals | Minor Group – 225 Sales, Marketing and Public Relations Professionals | Unit Group – 2252 ICT Sales Professionals

Code	Title	Skill Level	Specialisations	Description
225211	ICT Account Manager	1		Manages sale of computer hardware, software and services to existing account clients and identifies further sales opportunities within these accounts, builds new account clients, manages customer satisfaction and retention, and coordinates the preparation and presentation of ICT sales proposals and tenders.
225212	ICT Business Development Manager	1		Identifies and generates new ICT business opportunities to further improve market share and awareness by gaining an understanding of customers' ICT needs and promoting goods and services to these customers. May manage some key customer accounts.
225213	ICT Sales Representative	1		Develops and converts sales opportunities into sales of computer hardware, software and ICT services.





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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 261 Business and Systems Analysts, and Programmers | Unit Group – 2611 ICT Business and Systems Analysts

Code	Title	Skill Level	Specialisations	Description
261111	ICT Business Analyst BA (ICT) Business Consultant (ICT)	1	Business Systems Analyst	Identifies and communicates with users to formulate and produce a requirements specification to create system and software solutions.
261112	Systems Analyst	1		Evaluates processes and methods used in existing ICT systems, proposes modifications, additional system components or new systems to meet user needs as expressed in specifications and other documentation.
261113	User Experience Designer UI Designer Usability Architect User Interface Designer UX Designer	1		A User Experience Designer is involved in the end to end development process. This includes user research and consultation, strategy, design, branding, usability, function and testing. User Experience Designers predominantly work with digital tools, such as apps and websites.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 261 Business and Systems Analysts, and Programmers | Unit Group – 2612 Multimedia Specialists and Web Developers

Code	Title	Skill Level	Specialisations	Description
261211	Multimedia Specialist Electronic Game Developer Multimedia Developer Multimedia Programmer	1		Creates and manipulates computer animation, audio, video and graphic image files into multimedia programs to produce data and content for CD-ROMs, information kiosks, multimedia presentations, websites, mobile telephone resources, electronic gaming environments, e-commerce and e-security solutions, and entertainment and education products.
261212	Web Developer Web Programmer	1		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 Business Analysts, Web Designers and network and usability specialists.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 261 Business and Systems Analysts, and Programmers | Unit Group – 2613 Software and Applications Programmers

Code	Title	Skill Level	Specialisations	Description
261311	Analyst Programmer Programmer Analyst	1		Analyses user needs, produces requirements documentation and system plans, and encodes, tests, debugs, maintains and documents programs and applications.
261312	Developer Programmer Applications Developer ICT Developer ICT Programmer	1	Cyber Security Developer Database Developer Database Programmer (Systems) Network Programmer Software Developer Software Programmer	Interprets specifications, technical designs and flow charts, builds, maintains and modifies the code for software applications, constructs technical specifications, including cyber security, from a business functional model, and tests and writes technical documentation.
261313	Software Engineer Software Architect Software Designer	1	Computer Applications Engineer Database Designer Systems Architect	Designs, develops, modifies, documents, tests, implements, installs and supports software applications and systems.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 261 Business and Systems Analysts, and Programmers | Unit Group – 2613 Software and Applications Programmers

Code	Title	Skill Level	Specialisations	Description
261314	Software Tester	1		Specifies, develops and writes test plans and test scripts, produces test cases, carries out regression testing, and uses automated test software applications to test the behaviour, functionality and integrity of computer software, and documents the results of tests in defect reports and related documentation. It excludes testing of technical security controls.
261315	Cyber Security Engineer ICT Security Engineer Information Security Engineer	1		Designs, develops, modifies, documents, tests, implements, installs and supports cybersecurity software applications and systems; ensures they are fully integrated.
261316	DevOps Engineer	1	Cloud Computing Engineer Continuous Integration Engineer	Facilitate and undertake communication, collaboration, integration and automation to improve efficiency and workflow across different specialist IT teams.
261317	Penetration Tester Ethical Hacker ICT Vulnerability Tester White Hat	1		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.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 261 Business and Systems Analysts, and Programmers | Unit Group – 2613 Software and Applications Programmers

Code	Title	Skill Level	Specialisations	Description
261399	Software and Applications Programmers nec	1		<p>This occupation group covers Software and Applications Programmers not elsewhere classified.</p> <p>No occupations have currently been identified for this residual category.</p>





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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 262 Database and Systems Administrators, and ICT Security Specialists | Unit Group – 2621 Database and Systems Administrators, and ICT Security Specialists

Code	Title	Skill Level	Specialisations	Description
262111	Database Administrator Database Operator Database Specialist Database Support DBA	1	Database Analyst	Plans, develops, configures, maintains and supports an organisation's database management system in accordance with user requirements ensuring optimal database integrity, security, backup, reliability and performance.
262113	Systems Administrator Systems Manager	1		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.
262114	Cyber Governance Risk and Compliance Specialist	1		Lead the governance, risk and compliance for cyber security.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 262 Database and Systems Administrators, and ICT Security Specialists | Unit Group – 2621 Database and Systems Administrators, and ICT Security Specialists

Code	Title	Skill Level	Specialisations	Description
262115	Cyber Security Advice and Assessment Specialist Cyber Security Adviser Cyber Security Consultant ICT Security Adviser ICT Security Consultant	1		Conduct risk and security control assessments, interpret security policy and contribute to the development of standards and guidelines, review information system designs, provide guidance on security strategies to manage identified risks, provide specialist advice, explain systems security and the strengths and weaknesses.
262116	Cyber Security Analyst ICT Security Analyst Information Security Analyst	1	Cyber Security Researcher or Vulnerability Researcher Cyber Security Vulnerability Assessor Cyber Threat Analyst Malware Analyst	Analyses and assesses vulnerabilities in the infrastructure (software, hardware, networks), investigates available tools and countermeasures to remedy the detected vulnerabilities, and recommends solutions and best practices. Analyses and assesses damage to the data/infrastructure as a result of security incidents, examines available recovery tools and processes, and recommends solutions.
262117	Cyber Security Architect Enterprise Security Architect ICT Security Architect	1		Designs a security system or major components of a security system and may head a security design team building a new security system.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 262 Database and Systems Administrators, and ICT Security Specialists | Unit Group – 2621 Database and Systems Administrators, and ICT Security Specialists

Code	Title	Skill Level	Specialisations	Description
262118	Cyber Security Operations Coordinator Cyber Security Operations Manager ICT Security Administrator	1	Cyber Security Incident Responder	Leads the coordination, and response to complex cyber security incidents and hunt investigations, manage tasks across various teams for incident response and hunt operations, advise leadership on current operational collaborations and contribute toward strategic planning, facilitate incident response engagements, assess technical information to develop key messaging.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 263 ICT Network and Support Professionals | Unit Group – 2631 Computer Network Professionals

Code	Title	Skill Level	Specialisations	Description
263111	Computer Network and Systems Engineer	1	Computer Network Engineer Computer Systems Integrator	Plans, develops, deploys, tests and optimises network and system services, taking responsibility for configuration management and overall operational readiness of network systems, especially environments with multiple operating systems and configurations, and provides troubleshooting and fault-finding services for network problems.
263112	Network Administrator Network Specialist Network Support	1	LAN Administrator	Installs and maintains hardware and software, documents diagnosis and resolution of faults, manages user passwords, security and inventory documentation, ensures the efficient performance of servers, printers and personal computers, and attends to other operational tasks. May also perform tasks such as help desk support and user training.
263113	Network Analyst Network Designer Network Strategist	1	Network Architect Network Consultant	Researches and analyses network architecture, and recommends policies and strategies for designing, planning and coordinating an organisation's network such as the total system environment and architecture. May also perform operational tasks such as monitoring system performance, software and hardware upgrades, backups, support and network maintenance.



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Major group – 2 Professionals | Sub-major Group – 26 ICT Professionals | Minor Group – 263 ICT Network and Support Professionals | Unit Group – 2632 ICT Support and Test Engineers

Code	Title	Skill Level	Specialisations	Description
263211	ICT Quality Assurance Engineer Quality Analyst (ICT) Quality Manager (ICT) Quality Specialist (ICT)	1	Computer Systems Auditor Systems Auditor (ICT)	Creates, maintains and manages technical quality assurance processes and procedures to assess efficiency, validity, value and functional performance of computer systems and environments, and audits systems to ensure compliance with, and adherence to, accredited internal and external industry quality standards and regulations. May supervise the work of ICT quality assurance teams.
263212	ICT Support Engineer Support Analyst Support Architect	1		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.
263213	ICT Systems Test Engineer Systems Tester Test Analyst (ICT)	1		Specifies, develops and writes test plans and test scripts, produces test cases, carries out regression testing, and uses automated test software applications to test the behaviour, functionality and integrity of systems, and documents the results of tests in defect reports and related documentation.
263299	ICT Support and Test Engineers nec	1		This occupation group covers ICT Support and Test Engineers not elsewhere classified. No Occupations have currently been identified for this residual category



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Major group – 3 Technicians and Trades Workers | Sub-major Group – 31 Engineering, ICT and Science Technicians | Minor Group – 313 ICT and Telecommunications Technicians | Unit Group – 3131 ICT Support Technicians

Code	Title	Skill Level	Specialisations	Description
313111	Hardware Technician	2		Supports and maintains computer systems and peripherals by installing, configuring, testing, troubleshooting, and repairing hardware.
313112	ICT Customer Support Officer ICT Help Desk Officer ICT Help Desk Technician Systems Support Officer	2	Network Support Technician Operator Command Support Systems (Army)	Provides support, education and guidance in the deployment and maintenance of computer infrastructure and the diagnosis and resolution of technical problems and issues. May work in a call centre.
313113	Web Administrator Web Master	2		Designs, builds and maintains websites, and provides web technology solutions and services.
313199	ICT Support Technicians nec	2		This occupation group covers ICT Support Technicians not elsewhere classified. Occupations in this group include: <ul style="list-style-type: none">• Applications Packager• Computer Systems Technician



Figure 1. Structure of ANZSCO by skill level

