

**SUB-MAJOR GROUP 26 ICT PROFESSIONALS**

ICT PROFESSIONALS perform analytical, conceptual and practical tasks which support the efficient and secure provision of information and communication technology (ICT) services to government, commercial and industrial organisations, and individuals.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this sub-major group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- developing and documenting strategies, policies and procedures relating to the use of ICT technologies and services
- planning, analysing, designing, developing, implementing, testing, operating, maintaining and assisting with the use of technologies and services that enable information, such as voice, image and data, to be accessed, networked, stored, processed, transformed, manipulated and transmitted over a variety of media
- assessing the performance of ICT technologies and services, identifying limitations and inefficiencies, and recommending and implementing solutions
- providing troubleshooting and service support in diagnosing, resolving and correcting problems associated with the use of ICT technologies and service

Occupations in this sub-major group are classified into the following minor groups:

- 261 Business and Systems Analysts, and Programmers
- 262 Database and Systems Administrators, and ICT Security Specialists
- 263 ICT Network and Support Professionals

**MINOR GROUP 261 BUSINESS AND SYSTEMS ANALYSTS, AND PROGRAMMERS**

BUSINESS AND SYSTEMS ANALYSTS, AND PROGRAMMERS work with users to formulate system requirements, develop system plans and documentation, review and evaluate existing systems, and design and modify systems to meet users' business needs, create audiovisual applications, and develop, test and maintain code for computer applications and web sites.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this minor group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- identifying, formulating and documenting user ICT requirements
- providing advice, guidance, expertise and assistance in the system project decision making process and in the development of system proposals and strategies
- identifying and evaluating inefficiencies, deficiencies and limitations in existing systems and associated processes, procedures and methods, and recommending optimal business practices, and system functionality and behaviour
- testing, debugging, diagnosing and correcting problems to ensure acceptable quality and integrity of the system, and that programs and applications perform to specification
- designing and developing digital animations, imaging, presentations, games, video clips, and Internet applications using multimedia software, tools and utilities, interactive graphics and programming language

Occupations in this minor group are classified into the following unit groups:

- 2611 ICT Business and Systems Analysts
- 2612 Multimedia Specialists and Web Developers
- 2615 Software and Applications Programmers

UNIT GROUP 2611 ICT BUSINESS AND SYSTEMS ANALYSTS

ICT BUSINESS AND SYSTEMS ANALYSTS work with users to formulate system requirements, develop system plans and documentation, review and evaluate existing systems, and design and modify systems to meet users' business needs.

Non-ICT Business Analysts (for example, Management Consultants) are excluded from this unit group. Non-ICT Business Analysts are included in Unit Group 2247 Management and Organisation Analysts.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- working with users to formulate and document business requirements
- identifying, investigating, and analysing business processes, procedures and work practices
- identifying and evaluating inefficiencies and recommending optimal business practices, and system functionality and behaviour
- using project management methodologies, principles and techniques to develop project plans and to cost, resource and manage projects
- taking responsibility for deploying functional solutions, such as creating, adopting and implementing system test plans, which ensure acceptable quality and integrity of the system
- creating user and training documentation, and conducting formal training classes
- developing functional specifications for use by system developers
- using data and process modelling techniques to create clear system specifications for the design and development of system software
- acting as a central reference and information source, providing guidance and assistance in the system project decision making process

*Occupations:*

- 261111 ICT Business Analyst
- 261112 Systems Analyst

**261111 ICT BUSINESS ANALYST**

*Alternative Titles:*

- BA (ICT)
- Business Consultant (ICT)

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

*Skill Level:* 1

*Specialisation:*

- Business Systems Analyst

**261112 SYSTEMS ANALYST**

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.

*Skill Level:* 1

UNIT GROUP 2612 MULTIMEDIA SPECIALISTS AND WEB DEVELOPERS

MULTIMEDIA SPECIALISTS AND WEB DEVELOPERS create computer animation, audio, video and graphic image files for multimedia presentations, games, motion pictures, CD-ROMs, information kiosks and the web, and plan, produce and maintain web sites and web applications using web programming, scripting, authoring, content management and file transfer software.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- analysing, designing and developing Internet sites applying a mixture of artistry and creativity with software programming and scripting languages and interfacing with operating environments
- designing and developing digital animations, imaging, presentations, games, audio and video clips, and Internet applications using multimedia software, tools and utilities, interactive graphics and programming languages
- communicating with network specialists regarding web-related issues, such as security and hosting web sites, to control and enforce Internet and web server security, space allocation, user access, business continuity, web site backup and disaster recovery planning
- designing, developing and integrating computer code with other specialised inputs, such as image files, audio files and scripting languages, to produce, maintain and support web sites
- assisting in analysing, specifying and developing Internet strategies, web-based methodologies and development plans

*Occupations:*

- 261211 Multimedia Specialist
- 261212 Web Developer

**261211 MULTIMEDIA SPECIALIST**

*Alternative Titles:*

- Multimedia Developer
- Multimedia Programmer

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, web sites, mobile telephone resources, electronic gaming environments, e-commerce and e-security solutions, and entertainment and education products.

*Skill Level: 1*

**261212 WEB DEVELOPER**

*Alternative Title:*

- Web Programmer

Plans, produces and maintains web sites 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.

*Skill Level: 1*

UNIT GROUP 2613 SOFTWARE AND APPLICATIONS PROGRAMMERS

SOFTWARE AND APPLICATIONS PROGRAMMERS design, develop, test, maintain and document program code in accordance with user requirements, and system and technical specifications.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- researching, consulting, analysing and evaluating system program needs
- identifying technology limitations and deficiencies in existing systems and associated processes, procedures and methods
- testing, debugging, diagnosing and correcting errors and faults in an applications programming language within established testing protocols, guidelines and quality standards to ensure programs and applications perform to specification
- writing and maintaining program code to meet system requirements, system designs and technical specifications in accordance with quality accredited standards
- writing, updating and maintaining technical program, end user documentation and operational procedures
- providing advice, guidance and expertise in developing proposals and strategies for software design activities such as financial evaluation and costings for recommending software purchases and upgrades

*Occupations:*

- 261511 Analyst Programmer
- 261512 Developer Programmer
- 261515 Software Engineer
- 261599 Software and Applications Programmers nec

**261311 ANALYST PROGRAMMER**

*Alternative Title:*

Programmer Analyst

Analyses user needs, produces requirements documentation and system plans, and encodes, tests, debugs, maintains and documents programs and applications.

Skill Level: 1

UNIT GROUP 2613 SOFTWARE AND APPLICATIONS PROGRAMMERS *continued*

**261312 DEVELOPER PROGRAMMER**

Alternative Titles:

Applications Developer

ICT Developer

ICT Programmer

Interprets specifications, technical designs and flow charts, builds, maintains and modifies the code for software applications, constructs technical specifications from a business functional model, and tests and writes technical documentation.

Skill Level: 1

Specialisations:

Communications Programmer (Systems)

Database Developer

Database Programmer (Systems)

Network Programmer

Software Developer

Software Programmer

**261313 SOFTWARE ENGINEER**

Alternative Titles:

Software Architect

Software Designer

Designs, develops, modifies, documents, tests, implements, installs and supports software applications and systems.

Skill Level: 1

Specialisations:

Database Designer

Systems Architect

**261399 SOFTWARE AND APPLICATIONS PROGRAMMERS NEC**

This occupation group covers Software and Applications Programmers not elsewhere classified.

Skill Level: 1

Occupations in this group include:

Software Tester

**MINOR GROUP 262 DATABASE AND SYSTEMS ADMINISTRATORS, AND ICT SECURITY SPECIALISTS**

DATABASE AND SYSTEMS ADMINISTRATORS, AND ICT SECURITY SPECIALISTS plan, develop, maintain, manage and administer organisations' database management systems, operating systems and security policies and procedures to ensure optimal database and system integrity, security, backup, reliability and performance.

*Indicative Skill Level*

*In Australia and New Zealand:*

Most occupations in this minor group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- designing and maintaining database architecture, data structures, tables, dictionaries and naming conventions to ensure the accuracy and completeness of all data master files
- performing the operational establishment and preventive maintenance of backups, recovery procedures, and enforcing security and integrity controls
- implementing and administering database documentation, guidelines, policies and procedures
- testing database systems and upgrades, such as debugging, tracking, reproduction, logging and resolving all identified problems, according to approved quality testing scripts, procedures and processes
- accepting responsibility for the processes, procedures and operational management associated with system security and disaster recovery planning
- liaising with security vendors, suppliers, service providers and external resources; analysing, recommending, installing and maintaining software security applications; and monitoring contractual obligations, performance delivery and service level agreements
- troubleshooting and providing service support in diagnosing, resolving and repairing server-related hardware and software malfunctions, encompassing workstations and communication infrastructure
- preparing and maintaining documentation, policies and instructions, and recording and detailing operational procedures and system logs
- ensuring that the design of computer sites allows all components to fit together and work properly, and monitoring and adjusting the performance of networks
- continually surveying the current computer site to determine future network needs and making recommendations for enhancements in the implementation of future servers and networks

Occupations in this minor group are classified into the following unit group:

2621 Database and Systems Administrators, and ICT Security Specialists

**UNIT GROUP 2621 DATABASE AND SYSTEMS ADMINISTRATORS, AND ICT SECURITY SPECIALISTS**

DATABASE AND SYSTEMS ADMINISTRATORS, AND ICT SECURITY SPECIALISTS plan, develop, maintain, manage and administer organisations' database management systems, operating systems and security policies and procedures to ensure optimal database and system integrity, security, backup, reliability and performance.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- designing and maintaining database architecture, data structures, tables, dictionaries and naming conventions to ensure the accuracy and completeness of all data master files
- performing the operational establishment and preventive maintenance of backups, recovery procedures, and enforcing security and integrity controls
- implementing and administering database documentation, guidelines, policies and procedures
- testing database systems and upgrades, such as debugging, tracking, reproduction, logging and resolving all identified problems, according to approved quality testing scripts, procedures and processes
- accepting responsibility for the processes, procedures and operational management associated with system security and disaster recovery planning
- liaising with security vendors, suppliers, service providers and external resources; analysing, recommending, installing and maintaining software security applications; and monitoring contractual obligations, performance delivery and service level agreements
- troubleshooting and providing service support in diagnosing, resolving and repairing server-related hardware and software malfunctions, encompassing workstations and communication infrastructure
- preparing and maintaining documentation, policies and instructions, and recording and detailing operational procedures and system logs
- ensuring that the design of computer sites allows all components to fit together and work properly, and monitoring and adjusting the performance of networks
- continually surveying the current computer site to determine future network needs and making recommendations for enhancements in the implementation of future servers and networks

*Occupations:*

- 262111 Database Administrator
- 262112 ICT Security Specialist
- 262115 Systems Administrator

**UNIT GROUP 2621 DATABASE AND SYSTEMS ADMINISTRATORS, AND ICT SECURITY SPECIALISTS** *continued*

**262111 DATABASE ADMINISTRATOR**

Alternative Titles:

Database Operator  
Database Specialist  
Database Support  
DBA

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.

Skill Level: 1

Specialisation:

Database Analyst

**262112 ICT SECURITY SPECIALIST**

Alternative Title:

Security Administrator

Establishes, manages and administers an organisation's ICT security policy and procedures to ensure preventive and recovery strategies are in place, and minimise the risk of internal and external security threats.

Skill Level: 1

Specialisation:

Information Technology Security Manager

**262113 SYSTEMS ADMINISTRATOR**

Alternative Title:

Systems Manager

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.

Skill Level: 1

**MINOR GROUP 263 ICT NETWORK AND SUPPORT PROFESSIONALS**

ICT NETWORK AND SUPPORT PROFESSIONALS research, analyse, plan, design, install, monitor and maintain ICT systems to support the business needs of organisations and individuals.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this minor group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- planning, designing, developing, configuring and commissioning networks and systems
- analysing, evaluating and monitoring network infrastructure to ensure networks are configured to operate at optimal performance
- troubleshooting and diagnosing network and system problems, and determining the most appropriate means of resolving problems and issues to improve system performance
- monitoring the overall performance of systems to assess the need for updates, upgrades, enhancements, preventive maintenance and new systems, and recommending options for upgrading and improving the performance of systems
- scheduling and conducting quality audit inspections

Occupations in this minor group are classified into the following unit groups:

- 2631 Computer Network Professionals
- 2632 ICT Support and Test Engineers
- 2635 Telecommunications Engineering Professionals

**UNIT GROUP 2631 COMPUTER NETWORK PROFESSIONALS**

COMPUTER NETWORK PROFESSIONALS research, analyse and recommend strategies for network architecture and development, implement, manage, maintain and configure network hardware and software, and monitor and optimise performance, and troubleshoot and provide user support.

*Indicative Skill Level*

In Australia and New Zealand:

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems
- researching, analysing, evaluating and monitoring network infrastructure to ensure networks are configured to operate at optimal performance
- assessing and recommending improvements to network operations and integrated hardware, software, communications and operating systems
- providing specialist skills in supporting and troubleshooting network problems and emergencies
- installing, configuring, testing, maintaining and administering new and upgraded networks, software database applications, servers and workstations
- providing network programming in support of specific business needs and requirements
- preparing and maintaining procedures and documentation for network inventory, and recording diagnosis and resolution of network faults, enhancements and modifications to networks, and maintenance instructions
- monitoring network traffic, and activity, capacity and usage to ensure continued integrity and optimal network performance

*Occupations:*

- 263111 Computer Network and Systems Engineer
- 263112 Network Administrator
- 263115 Network Analyst

**263111 COMPUTER NETWORK AND SYSTEMS ENGINEER**

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.

*Skill Level 1**Specialisations:*

- Computer Network Engineer
- Computer Systems Integrator

UNIT GROUP 2631 COMPUTER NETWORK PROFESSIONALS *continued*

263112 NETWORK ADMINISTRATOR

Alternative Titles:

Network Specialist  
Network Support

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.

Skill Level: 1

Specialisation:

LAN Administrator

263113 NETWORK ANALYST

Alternative Titles:

Network Consultant  
Network Designer  
Network Strategist

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.

Skill Level: 1

Specialisation:

Network Architect

UNIT GROUP 2632 ICT SUPPORT AND TEST ENGINEERS

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

*Indicative Skill Level*

*In Australia and New Zealand:*

Most occupations in this unit group have a level of skill commensurate with a bachelor degree or higher qualification. At least five years of relevant experience and/or relevant vendor certification may substitute for the formal qualification. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification (ANZSCO Skill Level 1).

*Tasks include:*

- scheduling and conducting quality audit inspections, and analysing and reviewing systems, data and documentation
- identifying variations and potential high risk areas in securing adherence to standards and procedures
- recommending corrective action plans and improvements in the resolution of non-compliance with standards detected through monitoring and auditing of processes and procedures
- communicating, educating and training with users and management to ensure awareness and adherence to standards, procedures and quality control issues and activities
- assisting in troubleshooting, diagnosing, testing and resolving system problems and issues
- developing, conducting and providing technical guidance and training in application software and operational procedures
- analysing, evaluating and diagnosing technical problems and issues such as installation, maintenance, repair, upgrade and configuration and troubleshooting of desktops, software, hardware, printers, Internet, email, databases, operating systems and security systems
- testing, identifying and diagnosing functionality errors and faults in systems, and programming code within established testing protocols, guidelines and quality standards to ensure systems perform to specification
- performing organisational systems architecture reviews and assessments, and recommending current and future hardware and software strategies and directions
- creating and reviewing technical documentation such as procedural, instructional and operational guides and manuals, technical reports and specifications and maintenance inventory systems

*Occupations:*

- 263211 ICT Quality Assurance Engineer
- 263212 ICT Support Engineer
- 263215 ICT Systems Test Engineer
- 263299 ICT Support and Test Engineers nec

**UNIT GROUP 2632 ICT SUPPORT AND TEST ENGINEERS** *continued***263211 ICT QUALITY ASSURANCE ENGINEER**

Alternative Titles:

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

Creates, maintains and manages technical quality assurance processes and procedures to assess efficiency, reliability, 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.

Skill Level: 1

Specialisations:

- Computer Systems Auditor
- Systems Auditor (ICT)

**263212 ICT SUPPORT ENGINEER**

Alternative Titles:

- Support Analyst
- Support Architect

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.

Skill Level: 1

**263213 ICT SYSTEMS TEST ENGINEER**

Alternative Titles:

- Systems Tester
- Test Analyst (ICT)

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.

Skill Level: 1

**263299 ICT SUPPORT AND TEST ENGINEERS NEC**

This occupation group covers ICT Support and Test Engineers not elsewhere classified.

Skill Level: 1

Occupations in this group include:

- Usability Specialist

**SUB-MAJOR GROUP 31 ENGINEERING, ICT AND SCIENCE TECHNICIANS**

ENGINEERING, ICT AND SCIENCE TECHNICIANS perform tests and experiments, and provide technical support to Professionals engaged in research, design and development in the areas of agriculture, medicine, science, building, engineering, ICT and telecommunications.

*Indicative Skill Level*

Most occupations in this sub-major group have a level of skill commensurate with the qualifications and experience outlined below.

*In Australia:*

MQF Associate Degree, Advanced Diploma or Diploma (ANZSCO Skill Level 2)

*In New Zealand:*

NZ Register Diploma (ANZSCO Skill Level 2)

At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.

*Tasks include:*

- performing scientific tests, experiments and computations and collating and analysing the results
- inspecting animals, plants and agricultural produce to ensure compliance with government and industry standards
- developing, operating and maintaining instruments and equipment used in clinical diagnosis and experimental research
- preparing, interpreting, inspecting and revising drawings, plans, diagrams, designs, maps and charts
- installing, testing, repairing and modifying electrical, electronic and mechanical equipment
- estimating quantities and costs of materials
- providing technical support for telecommunications networks, and to users of computer hardware and software

Occupations in this sub-major group are classified into the following minor groups:

- 311 Agricultural, Medical and Science Technicians
- 312 Building and Engineering Technicians
- 313 ICT and Telecommunications Technicians

**MINOR GROUP 313 ICT AND TELECOMMUNICATIONS TECHNICIANS**

ICT AND TELECOMMUNICATIONS TECHNICIANS provide support to the development and maintenance of computer infrastructure, web technology and telecommunications networks, and the diagnosis and resolution of technical problems.

*Indicative Skill Level*

Most occupations in this minor group have a level of skill commensurate with the qualifications and experience outlined below.

*In Australia:*

MQF Associate Degree, Advanced Diploma or Diploma (ANZSCO Skill Level 2)

*In New Zealand:*

NZ Register Diploma (ANZSCO Skill Level 2)

At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.

*Tasks include:*

- determining software and hardware requirements to provide solutions for problems
- responding to inquiries about software and hardware problems
- repairing and replacing peripheral equipment such as terminals, printers and modems
- installing and downloading appropriate software, and adapting existing programs to meet users' requirements
- implementing computer networks, and ensuring efficient use of applications and equipment
- designing and maintaining web sites
- installing and maintaining microwave, telemetry, multiplexing, satellite and other radio and electromagnetic wave communication systems
- configuring and integrating network and telecommunications technology with computer software, hardware, peripherals and operating systems
- planning the development of customer access telecommunications network infrastructure

Occupations in this minor group are classified into the following unit groups:

- 3131 ICT Support Technicians
- 3132 Telecommunications Technical Specialists

UNIT GROUP 3131 ICT SUPPORT TECHNICIANS

ICT SUPPORT TECHNICIANS provide support for the deployment and maintenance of computer infrastructure and web technology and the diagnosis and resolution of technical problems.

*Indicative Skill Level:*

Most occupations in this unit group have a level of skill commensurate with the qualifications and experience outlined below.

*In Australia:*

AQF Associate Degree, Advanced Diploma or Diploma (ANZSCO Skill Level 2)

*In New Zealand:*

NZ Register Diploma (ANZSCO Skill Level 2)

At least three years of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or relevant vendor certification may be required in addition to the formal qualification.

*Tasks include:*

- determining software and hardware requirements to provide solutions to problems
- responding to inquiries about software and hardware problems
- adapting existing programs to meet users' requirements
- installing and downloading appropriate software
- ensuring efficient use of applications and equipment
- implementing computer networks
- designing and maintaining web sites
- repairing and replacing peripheral equipment such as terminals, printers and modems
- may work in a call centre

*Occupations:*

- 313111 Hardware Technician
- 313112 ICT Customer Support Officer
- 313115 Web Administrator
- 313199 ICT Support Technicians nec

**313111 HARDWARE TECHNICIAN**

Supports and maintains computer systems and peripherals by installing, configuring, testing, troubleshooting, and repairing hardware.

Skill Level 2

## MAJOR GROUP 3 *continued*

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### UNIT GROUP 3131 ICT SUPPORT TECHNICIANS *continued*

#### 313112 ICT CUSTOMER SUPPORT OFFICER

Alternative Titles:

- ICT Help Desk Officer
- ICT Help Desk Technician
- Systems Support Officer

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.

Skill Level 2

Specialisations:

- Network Support Technician
- Operator Command Support Systems (Army)

#### 313113 WEB ADMINISTRATOR

Alternative Title:

- Web Master

Designs, builds and maintains web sites, and provides web technology solutions and services.

Skill Level 2

#### 313199 ICT SUPPORT TECHNICIANS NEC

This occupation group covers ICT Support Technicians not elsewhere classified.

Skill Level 2

Occupations in this group include:

- Applications Packager
- Computer Systems Technician
- Telecommunications Computer Systems Technician

## MINOR GROUP 532 KEYBOARD OPERATORS

KEYBOARD OPERATORS input and process text and data, and prepare, edit and generate documents for storage, processing, publication and transmission.

*Indicative Skill Level:*

Most occupations in this minor group have a level of skill commensurate with the qualifications and experience outlined below.

*In Australia:*

AQF Certificate II or III (ANZSCO Skill Level 4)

*In New Zealand:*

NZ Register Level 2 or 3 qualification (ANZSCO Skill Level 4)

At least one year of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.

*Tasks include:*

- entering data and codes required to process information
- retrieving, confirming and updating data in storage and keeping records of data input
- taking verbatim records of proceedings in rapid shorthand using computerised equipment and shorthand-writing machines
- transcribing information recorded in shorthand and on sound recording equipment, and proofreading and correcting copy
- reading portions of transcripts during trials and other proceedings on request of Judges and other officials
- reproducing the spoken word, environmental sounds and song lyrics as captions for television programming, and the deaf and hearing impaired
- preparing reports, letters and similar material for publication and electronic transmission
- sorting outgoing material and preparing documents for transmission

Occupations in this minor group are classified into the following unit groups:

5321 Keyboard Operators

**UNIT GROUP 5321 KEYBOARD OPERATORS**

KEYBOARD OPERATORS input and process text and data, and prepare, edit and generate documents for storage, processing, publication and transmission.

*Indicative Skill Level:*

Most occupations in this unit group have a level of skill commensurate with the qualifications and experience outlined below.

*In Australia:*

AQF Certificate II or III (ANZSCO Skill Level 4)

*In New Zealand:*

NZ Register Level 2 or 3 qualification (ANZSCO Skill Level 4)

At least one year of relevant experience may substitute for the formal qualifications listed above. In some instances relevant experience and/or on-the-job training may be required in addition to the formal qualification.

*Tasks include:*

- entering data and codes required to process information
- retrieving, confirming and updating data in storage and keeping records of data input
- taking verbatim records of proceedings in rapid shorthand using computerised equipment and shorthand-writing machines
- transcribing information recorded in shorthand and on sound recording equipment, and proofreading and correcting copy
- reading portions of transcripts during trials and other proceedings on request of Judges and other officials
- reproducing the spoken word, environmental sounds and song lyrics as captions for television programming, and the deaf and hearing impaired
- preparing reports, letters and similar material for publication and electronic transmission
- sorting outgoing material and preparing documents for transmission

*Occupations:*

532111 Data Entry Operator

532112 Machine Shorthand Reporter

532115 Word Processing Operator

**532111 DATA ENTRY OPERATOR***Alternative Title:*

Data Processing Operator

Operates a keyboard to input and transfer data into a computer for storage, processing and transmission.

Skill Level 4

**UNIT GROUP 5321 KEYBOARD OPERATORS** *continued*

**532112 MACHINE SHORTHAND REPORTER**

Records and reproduces the spoken word in court and parliamentary proceedings, television programming and for the deaf and hearing impaired using handwritten shorthand, stenotype shorthand machines, computer-assisted transcription software and sound recording equipment.

Skill Level: 4

Specialisations:

Braille Transcriber

Court Reporter

Hazard Reporter

Realtime Reporter

Stenocaptioner

**532113 WORD PROCESSING OPERATOR**

Alternative Title:

Typist

Operates a computer to type, edit and generate a variety of documents and reports.

Skill Level: 4