Updating the
International Standard Classification of Occupations (ISCO)

Draft ISCO-08 Group Definitions:
Occupations in ICT

POLICY INTEGRATION DEPARTMENT
BUREAU OF STATISTICS

ISCO-08 Draft Definitions - ICT

ISCO 08 Code
2434
Title EN
Information and communications technology sales professionals

Lead Statement
   Information and communications technology (ICT) sales professionals sell, at the wholesale level, a range of computer hardware, software and other information and communications technology goods and services including installations and provide specialized information as required.

Task statement
   Tasks include:
   (a)   soliciting orders and selling goods to retail, industrial, wholesale and other establishments;
   (b)   selling technical equipment, supplies and related services to business establishments or individuals;
   (c)   discussing the needs of new and existing customers and providing specialized information about how particular equipment, supplies and services meet those needs;
   (d)   quoting and negotiating prices and credit terms, and completing contracts and recording orders;
   (e)   updating customer records and preparing sales reports;
   (f)   arranging delivery of goods, installation of equipment and the provision of services;
   (g)   reporting customers' reactions and requirements to manufacturers.

Included occupations
   Examples of the occupations classified here:

Excluded occupations
   Some related occupations classified elsewhere:
   Shop, sales assistant - 5223

Notes

Comments:
   Sources: ANZSCO 2252; ONET 41-4011.

ISCO 88 Code(s)
   3415, part

ISCO 08 Code
25
Title EN
Information and communications technology professionals

Lead Statement
   Information and communications technology professionals conduct research, plan, design, write, test, provide advice and improve information technology systems, hardware, software and related concepts for specific applications; develop associated documentation including principles, policies and procedures; and design, develop, control, maintain and support databases and other information systems to ensure optimal performance and data integrity and security.

Task statement
   Tasks performed usually include: researching information technology use in business functions and identifying areas for improvements and researching the theoretical aspects and operational methods for the use of computers; evaluating, planning and designing hardware or software configurations for specific applications including for Internet, Intranet and multimedia systems; designing, writing, testing and maintaining computer programs; designing and developing database architecture and database management systems; developing and implementing security plans and data administration policy, and administering computer networks and related computing environments; analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems.

Included occupations

Excluded occupations

Notes

Comments

ISCO 88 Code(s)

ISCO 08 Code
251
Title EN
Software and applications developers and analysts

Lead Statement
    Software and applications developers and analysts conduct research, plan, design, write, test, provide advice on and improve information technology systems, such as hardware, software and other applications to meet specific requirements.

Task statement
    Tasks performed usually include: researching information technology use in business functions and identifying areas in which improvements could be made to maximise effectiveness and efficiency; conducting research into the theoretical aspects of and operational methods for the use of computers; evaluating, planning and designing hardware or software configurations for specific applications; designing, writing, testing and maintaining computer programs for specific requirements; evaluating, planning and designing Internet, Intranet and multimedia systems.

Included occupations

Excluded occupations

Notes

Comments
    New group

ISCO 88 Code(s)

ISCO 08 Code
2511
Title EN
Systems analysts

Lead Statement

   Systems analysts conduct research, analyse and evaluate client information technology requirements, procedures or problems, and develop and implement proposals, recommendations, and plans to improve current or future information systems.

Task statement

   Tasks include:

   (a) consulting with users to formulate and document requirements and with management to ensure agreement on systems principles;
   (b) identifying and analysing business processes, procedures and work practices;
   (c) identifying and evaluating inefficiencies and recommending optimal business practices, and system functionality and behaviour;
   (d) taking responsibility for deploying functional solutions, such as creating, adopting and implementing system test plans;
   (e) developing functional specifications for use by systems developers;
   (f) expanding or modifying systems to improve work flow or serve new purposes;
   (g) coordinating and linking the computer systems within an organisation to increase compatibility.

Included occupations
   - Analyst, business (IT)
   - Analyst, communications/computers
   - Consultant, computer
   - Consultant, information technology
   - Consultant, systems
   - Designer, systems
   - Scientist, computer

Excluded occupations

Notes

Comments
Split group - includes IT business analysts
Sources: ONET 15-1051; ANZSCO 2611; CAN2512

ISCO 88 Code(s)
2131, part

2512
Title EN
Software developers

Lead Statement

Software developers research, analyse and evaluate requirements for existing or new software applications and operating systems, and design, develop, test and maintain software solutions to meet the requirements.

Task statement

Tasks include:

(a) researching, analysing and evaluating requirements for software applications and operating systems;

(b) researching, designing, and developing computer software systems;

(c) consulting with engineering staff to evaluate interface between hardware and software;

(d) developing and directing software testing and validation procedures;

(e) modifying existing software to correct errors, to adapt it to new hardware or to upgrade interfaces and improve performance;

(f) directing software programming and development of documentation;

(g) assessing, developing, upgrading and documenting maintenance procedures for operating systems, communications environments and applications software;

(h) consulting with customers concerning maintenance of software system.

Included occupations

- Analyst, programmer
- Designer, software
- Designer, systems
- Developer, software
- Engineer, computer systems

Excluded occupations

- Programmer, applications - see 2514
- Programmer, computer   - see 2514
- Programmer, software   - see 2514

Notes

Split group, includes software programmers.
Sources: ONET 15-1032; INDIA 2132; CAN2173; ANZSCO2613

ISCO 88 Code(s)

2131, part

ISCO 08 Code
2513
Title EN
Web and multimedia developers

Lead Statement

Web and multimedia development professionals combine design and technical knowledge to research, analyse, evaluate, design, programme and modify websites, and applications that draw together text, graphics, animations, imaging, audio and video displays, and other interactive media.

Task statement

Tasks include:

(a) analysing, designing and developing Internet sites applying a mixture of artistry and creativity with software programming and scripting languages and interfacing with operating environments;

(b) 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;

(c) 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;

(d) designing, developing and integrating computer code with other specialized inputs, such as image files, audio files and scripting languages, to produce, maintain and support web sites;

(e) assisting in analysing, specifying and developing Internet strategies, web-based methodologies and development plans.

Included occupations
- Architect, website
- Developer, Internet/Intranet/website
- Programmer, animation/computer games/multimedia

Excluded occupations
- Administrator, website - see 2521
- Designers, website   - see 2166
- Webmaster -   - see 3514
- Technician, website   - see 3514

Notes

Comments
Split group.
Sources: ANZSCO 2612; ONET 15-1099.04; CAN2175; CAN2174
Definition should be reviewed to ensure clear boundaries with 2156

ISCO 88 Code(s)   2131, part - 2132, part - 2139, part

ISCO 08 Code
2514
Title EN
Applications programmers

Lead Statement

Applications programmers write and maintain programmable code outlined in technical instructions and specifications for software applications and operating systems.

Task statement

Tasks include:

(a) writing and maintaining program code outlined in instructions and specifications in accordance with quality accredited standards;

(b) revising, repairing or expanding existing programs to increase operating efficiency or adapt to new requirements;

(c) conducting trial runs of programs and software applications to confirm that they will produce the desired information;

(d) compiling and writing documentation of program development;

(e) identifying and communicating technical problems, processes and solutions.

Included occupations
- Programmer, applications
- Programmer, computer
- Programmer, software

Excluded occupations
- Developer, software - see 2512

Notes

Comments
"Computer programmer" with no additional information to be coded here.
Sources: ONET15-1021;ANZSCO 2613;CAN2174

ISCO 88 Code(s)
2132, part

ISCO 08 Code
2519
Title EN
Software and applications developers and analysts not elsewhere classified

Lead Statement.

This unit group covers professionals not classified elsewhere in minor group 251, Software and applications developers and analysts. For instance, here should be classified those professionals specializing in quality assurance including software testing.

Task statement

Tasks include:
(a)   developing and documenting software testing plans;
(b)   installing software and hardware and configuring operating system software in preparation for testing;
(c)   verifying that programmes function according to user requirements and established guidelines;
(d)   executing, analyzing and documenting results of software application tests and information and telecommunication systems tests;
(e)   developing and implementing software and information system testing policies, procedures and scripts.

Included occupations
-    Analyst, quality assurance
-    Tester, software
-    Tester, systems

Excluded occupations

Notes

Comments

Sources: 261399 ANZSCO; INDIA 2139.10; CAN2283

ISCO 88 Code(s)

2131, part - 2132, part - 2139, part

ISCO 08 Code
252
Title EN
Database and network professionals

Lead Statement
    Database and network professionals design, develop, control, maintain and support the optimal performance and security of information technology systems and infrastructure, including databases, hardware and software, networks and operating systems.

Task statement
    Tasks performed usually include: designing and developing database architecture, data structures, dictionaries and naming conventions for information systems projects; designing, constructing, modifying, integrating, implementing and testing database management systems; developing and implementing security plans, data administration policy, documentation and standards; maintaining and administering computer networks and related computing environments; analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems.

Included occupations
    ICT network and hardware professionals.

Excluded occupations

Notes
New

ISCO 88 Code(s)

ISCO 08 Code
2521
Title EN
Database designers and administrators

Lead Statement
Database designers and administrators design, develop, control, maintain and support the optimal performance and security of databases.

Task statement
Tasks include:
(a) designing and developing database architecture, data structures, tables, dictionaries and naming conventions for information systems projects;
(b) designing, constructing, modifying, integrating, implementing and testing database management systems;
(c) conducting research and providing advice on the selection, application and implementation of database management tools;
(d) developing and implementing data administration policy, documentation, standards and models;
(e) developing policies and procedures for database access and usage and for the backup and recovery of data;
(f) performing the operational establishment and preventive maintenance of backups, recovery procedures, and enforcing security and integrity controls.

Included occupations
- Administrator, data
- Administrator, database
- Analyst, database
- Architect, database

Excluded occupations
- Administrator, computer systems – see 2522
- Administrator, network – see 2522
- Administrator, systems – see 2522
- Administrator, website – see 3514
- Webmaster – see 3514

Notes

Comments
Split group
Sources: ONET 15-1061.00; INDIA 2139;CAN2172;ANZSCO 2621

ISCO 88 Code(s)
2131, part

ISCO 08 Code
2522
Title EN
Systems administrators

Lead Statement

Systems administrators develop, control, maintain and support the optimal performance and security of information technology systems

Task statement

Tasks include:
- (a) maintaining and administering computer networks and related computing environments including computer hardware, systems software, applications software and all configurations;
- (b) recommending changes to improve systems and network configurations, and determining hardware or software requirements related to such changes;
- (c) diagnosing hardware and software problems;
- (d) performing data backups and disaster recovery operations;
- (e) operating master consoles to monitor the performance of computer systems and networks, and to coordinate computer network access and use.

Included occupations
- Administrator, computer systems
- Administrator, network
- Administrator, systems

Excluded occupations
- Administrator, data   - see 2521
- Administrator, database - see 2521
- Administrator, website - see 3514
- Architect, database   - see 2521
- Technician, website   - see 3514
- Webmaster   - see 3514

Notes
Split group
Sources: ONET 15-1071; ANZSCO2621

ISCO 88 Code(s)
2131, part

ISCO 08 Code

2523
Title EN
Computer network professionals

Lead Statement
   Computer network professionals research, analyse and recommend strategies for network architecture and development, implement, manage, maintain and configure network hardware and software, and monitor, troubleshoot and optimize performance.

Task statement
   (a)   analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems;
   (b)   researching, analysing, evaluating and monitoring network infrastructure to ensure networks are configured to operate at optimal performance;
   (c)   assessing and recommending improvements to network operations and integrated hardware, software, communications and operating systems;
   (d)   providing specialist skills in supporting and troubleshooting network problems and emergencies;
   (e)   installing, configuring, testing, maintaining and administering new and upgraded networks, software database applications, servers and workstations;
   (f)   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;
   (g)   monitoring network traffic, and activity, capacity and usage to ensure continued integrity and optimal network performance.

Included occupations

Excluded occupations

Notes
Sources: ONET 15-1081;ANZSCO 2631

ISCO 88 Code(s)
2131, part

ISCO 08 Code
2529
Title EN
Database and network professionals not elsewhere classified

Lead Statement
   This unit group covers database and networking professionals elsewhere in Minor group 252, Database and network professionals. For instance here should be classified Information communications and telecommunications security specialists.

Task statement
   Tasks include:
   (a)   developing plans to safeguard computer files against accidental or unauthorized modification, destruction, or disclosure and to meet emergency data processing needs;
   (b)   training users and promoting security awareness to ensure system security and to improve server and network efficiency;
   (c)   conferring with users to discuss issues such as computer data access needs, security violations, and programming changes;
   (d)   monitoring current reports of computer viruses to determine when to update virus protection systems;
   (e)   modifying computer security files to incorporate new software, correct errors, or change individual access status;
   (f)   monitoring use of data files and regulate access to safeguard information in computer files;
   (g)   performing risk assessments and executing tests of data processing system to ensure functioning of data processing activities and security measures;
   (h)   encrypting data transmissions and erecting firewalls to conceal confidential information as it is being transmitted and to keep out tainted digital transfers.

Included occupations
Security specialist, ICT

Excluded occupations

Notes

Comments
Source: ONET 15-1071.01; 262112 ANZSCO

ISCO 88 Code(s)
2131, part - 2132, part - 2139, part

ISCO 08 Code
35
Title EN
Information and communications technicians

Lead Statement
  Information and communications technicians provide support for the day-to-day running of computer systems, communications systems and networks and perform technical tasks related to telecommunications, broadcast of image and sound as well as other types of telecommunications signals on land, sea or in aircraft.

Task statement
  Tasks performed by workers in this sub-major group usually include: providing assistance to information and communications systems users; installing new programs and equipment; establishing, operating and maintaining network and other data communications systems; installing, monitoring and supporting Internet and Intranet websites or web server hardware or software; modifying web pages; and performing web server backup and recovery operations; controlling equipment to record sound, edit and mix image and sound recordings; controlling and maintaining transmitting and broadcast systems and satellite systems for radio and television programmes; controlling and maintaining radio communications systems, satellite services, and multiplex systems on land, sea or in aircraft; providing technical assistance connected with research and the development of computer systems and telecommunications equipment, or testing prototypes; designing and preparing blueprints of circuitry according to the specifications given; providing technical supervision of the manufacture, utilization, maintenance and repair of telecommunications systems.

Included occupations

Excluded occupations

Notes

Comments
Group upgraded

ISCO 88 Code(s)

ISCO 08 Code
351
Title EN
Information and communications technology operations and user support technicians

Lead Statement

Information technology operations and user support technicians provide support for the day-to-day running of communications systems, computer systems and networks and provide technical assistance to users.

Task statement

Tasks performed usually include: operating and controlling peripheral and related computer equipment; monitoring systems for equipment failure or errors in performance; loading peripheral equipment, such as printers, with selected materials for operating runs, or oversee loading of peripheral equipment by peripheral equipment operators; answering user inquiries regarding software or hardware operation to resolve problems; installing and performing minor repairs to hardware, software, or peripheral equipment, following design or installation specifications; overseeing the daily performance of systems; setting up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software; establishing, operating and maintaining network and other data communications systems; installing, monitoring and supporting the reliability and usability of Internet and Intranet websites or web server hardware or software; modifying web pages; and performing web server backup and recovery operations.

Included occupations

Excluded occupations

Notes

Comments
New group

ISCO 88 Code(s)

ISCO 08 Code
3511
Title EN
Information and communications technology operations technicians

Lead Statement

Information and communications technology operations technicians support the day-to-day processing, operation and monitoring of information and communications technology systems, including local and wide area networks (LANs and WANs), and hardware, software and related computer equipment to ensure optimal performance, and identify any problems.

Task statement

Tasks include:
(a) operating and controlling peripheral and related computer equipment;
(b) entering commands, using computer terminal, and activating controls on computer and peripheral equipment to integrate and operate equipment;
(c) monitoring systems for equipment failure or errors in performance;
(d) notifying supervisor or maintenance technicians of equipment malfunctions;
(e) responding to program error messages by finding and correcting problems, escalating the problem to other staff or terminating the program;
(f) reading job set-up instructions to determine equipment to be used, order of use, material such as disks and paper to be loaded, and control settings;
(g) retrieving, separating and sorting program output as needed, and sending data to specified users;
(h) loading peripheral equipment, such as printers, with selected materials for operating runs, or oversee loading of peripheral equipment by peripheral equipment operators.

Included occupations
-   Operator, computer
-   Operator, computer high-speed printer
-   Operator, computer peripheral equipment

Excluded occupations

Notes

Comments
Changed title
Sources: ONET 43-9011;

ISCO 88 Code(s)
3122

ISCO 08 Code
3512
Title EN
Information and communications technology user support technicians

Lead Statement
   Information and communications technology user support technicians provide technical assistance to users, either directly or by telephone, e-mail or other electronic means, including diagnosing and resolving issues and problems with software, hardware, computer peripheral equipment, networks, databases and the Internet, and providing guidance and support in the deployment, installation and maintenance of systems.

Task statement
   Tasks include:
   (a)   answering user inquiries regarding software or hardware operation to resolve problems;
   (b)   entering commands and observing system functioning to verify correct operations and detect errors;
   (c)   installing and performing minor repairs to hardware, software, or peripheral equipment, following design or installation specifications;
   (d)   overseeing the daily performance of communications and computer systems;
   (e)   setting up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software;
   (f)   maintaining records of daily data communication transactions, problems and remedial actions taken, or installation activities.
   (g)   emulating or reproducing technical problems encountered by users;
   (h)   consulting user guides, technical manuals and other documents to research and implement solutions.

Included occupations
   - Assistant, computer
   - Assistant, communications
   - Assistant, computer database
   - Assistant, computer engineering
   - Assistant, computer programming
   - Assistant computer systems analysis
   - Operator, computer, help desk

Excluded occupations

Notes

Comments
Split group
Source: ONET15-1041;UK3132; CAN2282;ANZSCO3131;

ISCO 88 Code(s)
3121, part

ISCO 08 Code
3513
Title EN
Computer network and systems technicians

Lead Statement
Computer network and systems technicians establish, operate and maintain network and other data communications systems.

Task statement
Tasks include:
- (a)   operating, maintaining and troubleshooting network systems;
- (b)   operating and maintaining data communications systems other than network;
- (c)   assisting users with network and data communications problems;
- (d)   identifying areas needing upgraded equipment and software;
- (e)   installing computer hardware, network software, operating system software and applications software.
- (f)   performing start up and close down as well as backup and disaster recovery operations.

Included occupations
Technician, computer network
Technician, network support

Excluded occupations
Technician, web – see 3514

Notes

Comments
Source: CAN 2281
What about systems software testing? This group was originally conceived as systems testing technicians but title was changed following consultations with US BLS in Washington, April 2007. DH

ISCO 88 Code(s)
2139, part 3121, part

ISCO 08 Code
3514
Title EN
Web technicians

Lead Statement

Web technicians maintain, monitor and support the optimal functioning of Internet and Intranet websites and web server hardware and software.

Task statement

Tasks include:
(a) installing, monitoring and supporting the reliability and usability of Internet and Intranet websites or web server hardware or software;
(b) developing and maintaining documentation, policies and instructions, recording operational procedures and system logs;
(c) developing, coordinating, implementing and monitoring security measures;
(d) analysing and making recommendations to enhance performance, including upgrading and acquiring new systems;
(e) liaising with, and providing guidance to, clients and users;
(f) modifying web pages;
(g) performing web server backup and recovery operations.

Included occupations
- Administrator, website
- Technician, website
- Webmaster

Excluded occupations
- Administrator, computer systems - see 2522
- Administrator, network - see 2522
- Administrator, systems - see 2522
- Analyst, systems - see 2511
- Designer, computer software - see 2512
- Designer, computer games /animation /multimedia - see 2513
- Developer, website/Internet/Intranet - see 2513

Notes

Comments

ISCO 88 Code(s)
3121, part - 3122

ISCO 08 Code
352
Title EN
Communications technicians

Lead Statement
   Communications technicians control technical functioning of equipment to record and edit images and sound and for transmitting radio and television broadcasts of images and sounds, as well as other types of telecommunication signals on land, sea or in aircraft, perform technical tasks connected with telecommunications engineering research and with the design, manufacture, assembly, construction, operation, maintenance and repair of telecommunications systems.

Task statement
   Tasks performed usually include: controlling equipment to record sound, edit and mix image and sound recordings; controlling and maintaining transmitting and broadcast systems and satellite systems for radio and television programmes; controlling and maintaining radio communications systems, satellite services, and multiplex systems on land, sea or in aircraft; providing technical assistance connected with research and the development of telecommunications equipment, or testing prototypes; designing and preparing blueprints of circuitry according to the specifications given; providing technical supervision of the manufacture, utilisation, maintenance and repair of telecommunications systems.

Included occupations

Excluded occupations

Notes

Comments
New

ISCO 88 Code(s)

ISCO 08 Code
3521
Title EN
Broadcasting and audio-visual technicians

Lead Statement
    Broadcasting and audio-visual technicians control technical functioning of equipment to record and edit images and sound and for transmitting radio and television broadcasts of images and sounds, as well as other types of telecommunication signals on land, sea or in aircraft.

Task statement
    Tasks include:
    (a)   controlling equipment to record sound;
    (b)   controlling equipment to edit and mix image and sound recordings to ensure satisfactory quality and to create special image and sound effects;
    (c)   applying knowledge of principles and practices of image and sound recording and editing in order to identify and solve problems;
    (d)   controlling transmitting and broadcast systems and satellite systems for radio and television programmes;
    (e)   controlling radio communications systems, satellite services, and multiplex systems on land, sea or in aircraft;
    (f)   applying knowledge of principles and practices of broadcasting, telecommunications terminals and transmissions systems, in order to identify and solve problems;
    (g)   making emergency repairs to equipment.

Included occupations
    -    Assistant, production
    -    Operator, audio/visual
    -    Operator, broadcasting equipment
    -    Technician, broadcast

Excluded occupations
Photographer

Notes

Comments
Video and film camera operators are to be included here. Only stills photographers are involved in 3441

ISCO 88 Code(s)
3131, part 3132

ISCO 08 Code
3522
Title EN
Telecommunications engineering technicians

Lead Statement
Telecommunications engineering technicians perform technical tasks connected with telecommunications engineering research, as well as with the design, manufacture, assembly, construction, operation, maintenance and repair of telecommunications systems.

Task statement
Tasks include:
(a) providing technical assistance connected with research and the development of telecommunications equipment, or testing prototypes;
(b) studying technical material such as blue prints and sketches to determine the method of work to be adopted;
(c) preparing detailed estimates of quantities and costs of materials and labour required for the manufacture and installation of telecommunications equipment, according to the specifications given;
(d) providing technical supervision of the manufacture, utilisation, maintenance and repair of telecommunications systems to ensure satisfactory performance and compliance with specifications and regulations;
(e) applying technical knowledge of telecommunications engineering principles and practices in order to identify and solve problems arising in the course of their work.

Included occupations
Examples of the occupations classified here:
- Technician, engineering/telecommunications

Excluded occupations
Some related occupations classified elsewhere:
- Installers and repairers, information and communications technology – see 7422
- Technician, engineering/electronics – see 3114

Notes

Comments
Sources : http://www.michigan.gov/som/0,1607,7-192-29940_32270-95740--,00.html
ONET 17-03023.01;INDIA 3114.20

ISCO 88 Code(s)
3114, part

ISCO 08 Code
742
Title EN
Electronics and telecommunications installers and repairers

Lead Statement

Electronics and telecommunications installers and repairers fit, maintain, adjust and repair electronic equipment such as commercial and office machines and electronic instruments and control systems and install, repair and maintain telecommunications equipment, data transmission equipment, cables, antennae and repair, fit and maintain computers.

Task statement

Tasks performed usually include: examining and testing machines, equipment, instruments and control systems to diagnose faults; adjusting, repairing, and replacing worn and defective parts and wiring, and maintaining machines, equipment and instruments; installing electronic instruments and control systems; fitting and adjusting electronic equipment; maintaining, troubleshooting, fitting, adjusting, testing and repairing computers, data transmission equipment and computer peripherals; installing, maintaining, repairing, and diagnosing malfunctions of microwave, telemetry, multiplexing, satellite and other radio and electromagnetic wave communications systems; providing technical advice and information, and monitoring the performance of complex telecommunications networks and equipment; installing, joining and repairing cabling for computer, radio, telephone and television transmission; installing, maintaining and repairing antennae used in communications.

Included occupations

Excluded occupations

Notes

ISCO 08 Code
7421
Title EN
Electronics mechanics and servicers

Lead Statement
Electronics mechanics and servicers fit, maintain, adjust and repair electronic equipment such as commercial and office machines and electronic instruments and control systems.

Task statement
Tasks include:
(a)   examining and testing machines, equipment, instruments and control systems to diagnose faults;
(b)   adjusting, repairing, and replacing worn and defective parts and wiring, and maintaining machines, equipment and instruments;
(c)   reassembling, test operating and adjusting equipment;
(d)   installing electronic instruments and control systems;
(e)   fitting and adjusting electronic equipment.

Included occupations
-     Mechanic, automated teller machines
-     Mechanic, electronic
-     Servicer, electronic equipment
-     Technician, photocopy machine

Excluded occupations

Notes

ISCO 88 Code(s)
7243 part, 7242

ISCO 08 Code
7422
Title EN
Information and communications technology (ICT) installers and servicers

Lead Statement
   Information and communications technology (ICT) installers and servicers install, repair and maintain telecommunications equipment, data transmission equipment, cables, antennae and conduits and repair, fit and maintain computers.

Task statement
   Tasks include:
   (a)   maintaining, troubleshooting, testing and repairing computers, data transmission equipment and computer peripherals;
   (b)   fitting and adjusting computer hardware;
   (c)   installing, maintaining, repairing, and diagnosing malfunctions of microwave, telemetry, multiplexing, satellite and other radio and electromagnetic wave communications systems;
   (d)   providing technical advice and information, and monitoring the performance of complex telecommunications networks and equipment;
   (e)   installing and repairing cabling for computer, radio, telephone and television transmission;
   (f)   joining telecommunications and data cables and sealing sheaths;
   (g)   installing, maintaining and repairing antennae used in communications.

Included occupations
   -   Cabler, data and telecommunications
   -   Fitter, computer equipment
   -   Technician, communications
   -   Technician, hardware
   -   Technician, radio communications
   -   Technician, telecommunications

Excluded occupations

Notes

Comments
Computer installers are classified in Major Group 3 as ICT support technicians as installation and set up is usually done by same person.

ISCO 88 Code(s)
7242 part, 7243 part, 7244, 7245