

**MAJOR GROUP 4  
TRADESPERSONS**

Tradespersons perform a variety of complex physical tasks, applying a body of trade-specific technical knowledge. These tasks require initiative and a high degree of manual dexterity and other practical skills.

Occupations in this major group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Tradespersons typically include constructing buildings and other large structures; fabricating individual (i.e. not mass-produced) metal, wood, glass, and textile products; repairing and maintaining these individual products, motor vehicles and other machinery, electrical and electronic equipment; applying protective and decorative finishes to surfaces; printing and binding documents; preparing and cooking food; and propagating and cultivating plants.

Tradespersons operate a wide variety of complex precision machinery to complete several stages in the fabrication and maintenance of products. Occupations concerned with the operation of a single non-precision or partly automated machine during one phase of the manufacturing process are located in Minor Group 74, Machine Operators.

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

- 41 METAL FITTING AND MACHINING TRADESPERSONS**
- 42 OTHER METAL TRADESPERSONS**
- 43 ELECTRICAL AND ELECTRONICS TRADESPERSONS**
- 44 BUILDING TRADESPERSONS**
- 45 PRINTING TRADESPERSONS**
- 46 VEHICLE TRADESPERSONS**
- 47 FOOD TRADESPERSONS**
- 48 AMENITY HORTICULTURAL TRADESPERSONS**
- 49 MISCELLANEOUS TRADESPERSONS**

## MINOR GROUP 41 METAL FITTING AND MACHINING TRADESPERSONS

METAL FITTING AND MACHINING TRADESPERSONS shape metal stock, usually to fine tolerances, using lathes and other precision metal tools to fabricate or repair tools, dies, jigs and other individual (ie not mass-produced) metal products, assemble machinery incorporating these as components, and set up partially automated machine tools for use by less skilled operators.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Metal Fitting and Machining Tradespersons typically include selecting stock; determining dimensions and tolerances; setting machine controls; manipulating stock and controls of machine tools to shape stock by cutting, drilling or abrasion; measuring product for conformity to specifications; and fitting parts into machinery using hand tools, and testing to ensure that machinery functions correctly.

This minor group includes Metal Machinists (Second and Third Class) because they perform similar tasks to Metal Machinists (First Class), and cannot reliably be distinguished from them in statistical collections, although their skill level is different.

Tool Designers are excluded from this minor group because they are primarily involved in the design rather than fabrication of tools. They are located in Unit Group 3205, Mechanical Engineering Associates and Technicians.

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

### 4101 TOOLMAKERS

### 4103 METAL FITTERS AND MACHINISTS

#### 4101 TOOLMAKERS

TOOLMAKERS make and repair tools, dies, jigs, fixtures and other parts and equipment to fine tolerances. They may supervise, or receive training in, occupations in this unit group.

##### SKILL LEVEL

The entry requirement for this unit group is a 4 year trade certificate.

##### TASKS include:

- determining dimensions and tolerances of article to be manufactured from drawings, blueprints or specifications
- measuring and marking out metal stock or casting using various gauges
- shaping metal stock using machine tool
- checking accuracy of manufactured article to fine tolerances, using precision measuring instruments
- testing and modifying manufactured article

##### OCCUPATIONS

4101-01 Supervisor, Toolmakers  
Supervisor, Tool Room (a)

4101-11 Toolmaker  
Tool and Die Maker (a)  
Die Caster (s)  
Die Sinker (s)  
Jigmaker (Metal) (s)  
Plastic Mould Maker (s)  
Press-Tool Maker (s)

4101-91 Apprentice Toolmaker

#### 4103 METAL FITTERS AND MACHINISTS

METAL FITTERS AND MACHINISTS set up machining tools, production machines and textile machines, operate machining tools and machines to shape metal stock and castings, and fit and assemble the fabricated metal parts into products. They may supervise, or receive training in, occupations in this unit group.

##### SKILL LEVEL

The entry requirement for this unit group is a trade certificate, except for Die Setters, Metal Machinists (Second Class), and Metal Machinists (Third Class) which have no specific entry requirement.

##### TASKS include:

- determining suitable material, method and sequence of operations, and machine settings from drawings, blueprints, or job specification cards
- setting guides, stops and other controls on machining tool, setting up prescribed cutting or shaping tool or die in machine or press, or setting controls for textile machines
- forming metal stock or castings to fine tolerances using machining tool to press, cut, grind, plane, bore or drill metal
- fitting fabricated metal parts into products and assembling metal parts and sub-assemblies to produce machinery and equipment using hand tools
- checking fabricated and assembled metal parts for

## GROUP DEFINITIONS

## TRADESPERSONS

accuracy, clearance and fit using precision measuring instruments

- preparing pattern mechanism to control operation of textile machines used to spin, weave, knit, sew and tuft fabric

### OCCUPATIONS

#### 4103-01 Supervisor, Metal Fitters and Machinists

#### 4103-11 Fitter

Bench Fitter (s)  
Diesel Fitter-Mechanic (s)  
Fitter and Turner (s)  
Fitter-Machinist (s)  
Fitter-Mechanic (s)  
Fitter-Welder (s)  
Maintenance Fitter (s)  
Mechanic (Diesel and Heavy Earthmoving Equipment) (s)  
Plant Mechanic (s)  
Service Fitter (s)  
Sewing Machine Mechanic (s)

#### 4103-13 Metal Machinist (First Class)

Aircraft Machinist (s)  
Automotive Machinist (s)  
Machine Setter (Metal) (s)  
Milling Machinist (s)  
Radial Driller (Metal) (s)  
Turner (s)  
Vertical Borer (s)

#### 4103-15 Textile Mechanic

Loom Tuner (s)

#### 4103-17 Die Setter

#### 4103-19 Metal Machinist (Second Class)

Machine Tool Operator (Metal) (a)  
Gear Cutter (s)

#### 4103-21 Metal Machinist (Third Class)

#### 4103-91 Apprentice Metal Fitter and Machinist

Apprentice Aircraft Machinist (s)  
Apprentice Automotive Machinist (s)  
Apprentice Fitter, Turner and Machinist (s)  
Apprentice Mechanic (Diesel and Heavy Earthmoving Equipment) (s)  
Apprentice Sewing Machine Mechanic (s)  
Apprentice Textile Mechanic (s)

## MINOR GROUP 42 OTHER METAL TRADESPERSONS

OTHER METAL TRADESPERSONS cut, shape, join and finish metal, using a variety of tools and equipment other than lathes and similar machine tools.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Other Metal Tradespersons typically include drawing or marking out patterns; heating metal stock and shaping it using hammers; cutting stock or mould components to shape using hand tools, cutting torches or machine tools; joining components by welding, soldering, brazing, rivetting, bolting, screwing or gluing; dismantling and inspecting aircraft components and complex items of metal machinery, repairing or replacing faulty components, and re-assembling; and applying protective or decorative finishes to metal products.

This minor group includes Electroplaters and Sheet Metal Workers (Second and Third Class) because they perform similar tasks to Electroplaters and Sheet Metal Workers (First Class) and cannot reliably be distinguished from them in statistical collections, although their skill level is different.

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

- 4201 FORGING TRADESPERSONS**
- 4203 SHEETMETAL TRADESPERSONS**
- 4205 STRUCTURAL STEEL, BOILERMAKING AND WELDING TRADESPERSONS**
- 4207 METAL CASTING TRADESPERSONS**
- 4209 METAL FINISHING TRADESPERSONS**
- 4211 AIRCRAFT MAINTENANCE ENGINEERS**
- 4213 PRECISION METAL TRADESPERSONS**

### 4201 FORGING TRADESPERSONS

FORGING TRADESPERSONS heat and hammer metal to shape, make or repair metal articles, including horseshoes. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a 4 year trade certificate.

#### TASKS include:

- selecting metal for job and preparing horses' hooves for shoeing
- heating metal in fire, furnace or forge or by using welding equipment or propane torch
- hammering, punching or cutting metal to join parts using hand tools or machine presses
- tempering and hardening finished article by quenching in oil or water bath or by cooling gradually in air
- nailing horseshoe to hoof and trimming hoof flush with shoe using rasp

#### OCCUPATIONS

- 4201-01 Supervisor, Forging Tradespersons**
- 4201-11 Blacksmith**  
Forging Smith (s)

Hammersmith (s)  
Springmaker (s)  
Toolsmith (s)

**4201-13 Farrier**

**4201-91 Apprentice Forging Tradesperson**  
Apprentice Blacksmith (s)  
Apprentice Farrier (s)

### 4203 SHEETMETAL TRADESPERSONS

SHEETMETAL TRADESPERSONS cut, shape and join sheetmetal using hand and power tools, or machines, or assemble and install sheetmetal products. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate, except for Sheetmetal Worker (Second Class), which has no specific entry requirement.

#### TASKS include:

- marking out selected sheetmetal using templates, gauges and other instruments
- cutting sheetmetal using hand tools, power shears, guillotines or drills



## GROUP DEFINITIONS

- shaping cut sheetmetal into products using folding machines, rollers or presses, or metal spinning lathe
- checking dimensions of formed articles using precision measuring instruments
- bolting, rivetting, brazing or soldering components together using hand or power tools
- finishing products by cleaning, polishing, filing or bathing them in acid solution

### OCCUPATIONS

- 4203-01 Supervisor, Sheetmetal Tradespersons**  
Supervisor, Metal Spinners (s)
- 4203-11 Sheetmetal Worker (First Class)**  
Sheetmetal Patternmaker (s)
- 4203-13 Coppersmith**
- 4203-15 Metal Spinner**
- 4203-17 Sheetmetal Worker (Second Class)**  
Ductworker (s)  
Guillotine Operator (Metal) (s)  
Metal Bending Machine Operator (s)  
Sheetmetal Rolling Machine Operator (s)
- 4203-91 Apprentice Sheetmetal Tradesperson**  
Apprentice Coppersmith (s)  
Apprentice Metal Spinner (s)

## 4205 STRUCTURAL STEEL, BOILERMAKING AND WELDING TRADESPERSONS

STRUCTURAL STEEL, BOILERMAKING AND WELDING TRADESPERSONS cut, shape, join and repair metal parts of iron and steelwork structures, pressure pipes, ships, boilers or other vessels subject to greater pressure than the weight of their contents, and weld metals together. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate, except for Welders (Second Class) and Welders (Third Class), which have no formal entry requirement.

### TASKS include:

- cutting marked-out metal sections and shapes using hand tools, flame cutting torches or metal cutting machines
- shaping and bending metal sections and pipes using hand and machine tools or by heating and hammering
- aligning parts to be joined using hand tools and measuring instruments and, for large sections, with the aid of cranes or other lifting equipment
- joining metal sections by various welding techniques, bolting or rivetting
- cleaning and smoothing weld by filing, chiselling and grinding

### OCCUPATIONS

- 4205-01 Supervisor, Structural Steel, Boilermaking and Welding Tradespersons**
- 4205-11 Metal Fabricator**  
Boilermaker (a)  
Boilermaker-Welder (s)  
Metal Fabricator-Welder (s)

## TRADESPERSONS

- Template Maker (s)
- 4205-13 Structural Steel Tradesperson**  
Structural Boilermaker (a)  
Structural Metal Fabricator (a)
- 4205-15 Pressure Welder**
- 4205-17 Welder (First Class)**  
Welder (Special Class) (s)
- 4205-19 Welder (Second Class)**  
Arc Welder (s)  
Brazier (s)  
Gas Welder-Cutter (s)  
Gas-shielded Arc Welding Operator (s)  
Metal-Inert-Gas Welder (s)  
Oxy-acetylene Welder-Cutter (s)  
Plasma-arc Welder (s)  
Solderer (s)
- 4205-21 Welder (Third Class)**
- 4205-91 Apprentice Structural Steel, Boilermaking and Welding Tradesperson**  
Apprentice Boilermaker (s)  
Apprentice Metal Fabricator (s)  
Apprentice Structural Steel Tradesperson (s)  
Apprentice Template Maker (s)  
Apprentice Welder (s)

## 4207 METAL CASTING TRADESPERSONS

METAL CASTING TRADESPERSONS plan and fabricate mould patterns and form sand moulds and cores used in the production of metal castings. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

### TASKS include:

- drawing pattern for mould on layout board
- cutting and shaping stock using band-saws, lathes, planers and routers
- assembling parts using glue, dowels and screws, to form moulding box
- smoothing and shaping surface of moulding box using hand tools, and applying sealing finish
- applying parting agent to moulding box and positioning vents to allow gases to escape
- filling box with sand and packing sand in place using hand ramming tools or pneumatic hammers
- applying refractory paint to prevent molten metal from fusing with sand and positioning cores in mould

### OCCUPATIONS

- 4207-01 Supervisor, Metal Casting Tradespersons**
- 4207-11 Metal Casting Patternmaker**
- 4207-13 Moulder and Coremaker**  
Coremaker (s)  
Metal Moulder (s)
- 4207-91 Apprentice Metal Casting Tradesperson**  
Apprentice Metal Casting Patternmaker (s)  
Apprentice Moulder and Coremaker (s)

**4209 METAL FINISHING TRADESPERSONS**

METAL FINISHING TRADESPERSONS coat metal parts and articles using electrolytic processes or polish metal articles. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate, except for Electroplaters (Second Class), which have no formal entry requirement.

**TASKS include:**

- polishing and buffing sheet or other metal by hand or machine to finish metal parts or articles
- preparing electrolytic and silver solutions for electroforming and applying silver solution to the objects to be coated
- setting and adjusting controls to regulate electric current and depositing of coating on objects
- rinsing solutions from coated articles
- checking depth of coating

**OCCUPATIONS**

**4209-01 Supervisor, Metal Finishing Tradespersons**

**4209-11 Metal Polisher**

**4209-13 Electroplater (First Class)**  
Anodiser (s)  
Electroformer (s)

**4209-15 Electroplater (Second Class)**  
Production Plater (a)  
Metal Plater (s)

**4209-17 Electroplater (Third Class)**  
Barrel Plater (s)

**4209-91 Apprentice Metal Finishing Tradesperson**  
Apprentice Electroplater (s)  
Apprentice Metal Polisher (s)

**4211 AIRCRAFT MAINTENANCE ENGINEERS**

AIRCRAFT MAINTENANCE ENGINEERS maintain and repair aircraft engines, electrical systems and mechanical systems and assemble components of aircraft frames. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- dismantling, inspecting and reassembling aircraft engines, ancillary motors and engine accessories, electrical systems, or sub-assemblies of aircraft frames using hand and power tools and equipment
- testing aircraft communication equipment, aircraft instrumentation and electrical systems using electronic testing equipment and specialised test apparatus
- assembling parts and sub-assemblies of aircraft frames using hand and power tools
- installing electrical circuits and equipment
- conducting routine pre-flight inspections of engines,

aircraft frames and mechanical systems

**OCCUPATIONS**

**4211-01 Supervisor, Aircraft Maintenance Engineers**

**4211-11 Aircraft Maintenance Engineer (Engines)**  
Aircraft Engine Fitter (a)  
Aircraft Ground Engineer (Engines) (a)  
Aircraft Mechanic (Engines) (a)  
Examiner of Aircraft Engines (s)  
Licensed Aircraft Maintenance Engineer (Engines) (s)  
Line Maintenance Aircraft Engineer (Engines) (s)

**4211-13 Aircraft Maintenance Engineer (Airframes)**  
Aircraft Ground Engineer (Airframes) (a)  
Airframe Fitter (a)  
Airframe Mechanic (a)  
Examiner of Airframes (s)  
Licensed Aircraft Maintenance Engineer (Airframes) (s)  
Line Maintenance Aircraft Engineer (Airframes) (s)

**4211-15 Aircraft Maintenance Engineer (Electrical)**  
Aircraft Electrical Engineer (a)  
Aircraft Ground Engineer (Electrical) (a)  
Examiner of Aircraft (Electrical) (s)  
Licensed Aircraft Maintenance Engineer (Electrical) (s)

**4211-17 Aircraft Maintenance Engineer (Radio)**  
Aircraft Ground Engineer (Radio) (a)  
Aircraft Mechanic (Radio) (a)  
Examiner of Aircraft Radio (s)  
Licensed Aircraft Maintenance Engineer (Radio) (s)

**4211-19 Aircraft Maintenance Engineer (Instruments)**  
Aircraft Ground Engineer (Instruments) (a)  
Aircraft Mechanic (Instruments) (a)  
Examiner of Aircraft Instruments (s)  
Licensed Aircraft Maintenance Engineer (Instruments) (s)

**4211-91 Apprentice Aircraft Maintenance Engineer**  
Apprentice Aircraft Ground Engineer (s)  
Apprentice Aircraft Mechanic (s)

**4213 PRECISION METAL TRADESPERSONS**

PRECISION METAL TRADESPERSONS fabricate, assemble, maintain and repair precision instruments. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- assembling parts and sub-assemblies of precision implements, locks, timepieces and small arms using hand tools, measuring instruments and magnifying aids
- calibrating precision instruments using standard weights and measures, jigs and fixtures and hand tools to adjust and align parts and small balancing weights
- dismantling precision instruments, locks, timepieces and small arms, repairing or replacing defective parts and reassembling article using hand or power

tools or specially designed machines

- testing circuits in electronic timepieces using electronic testing equipment
- installing security systems, changing tumblers in locks, changing locks, cutting keys and opening locks by manipulation
- making blades for circular, band or other power saws and/or repairing, setting and sharpening blades for hand or power saws
- inscribing letters, figures and designs on surfaces of jewellery, trophies or other ornamental items

**OCCUPATIONS**

**4213-01 Supervisor, Precision Metal Tradespersons**

**4213-11 Precision Instrument Maker and Repairer**  
Instrument Fitter (a)  
Camera Repairer (s)  
Scalemaker and Adjuster (s)  
Scientific Instrument Maker and Repairer (s)

**4213-13 Watch and Clock Maker and Repairer**  
Watchmaker (a)

**4213-15 Locksmith**  
Safemaker (s)

**4213-17 Saw Maker and Repairer**  
Saw Doctor (a)  
Saw Sharpener (s)

**4213-19 Gunsmith**  
Armourer (a)

**4213-21 Engraver**

**4213-91 Apprentice Precision Metal Tradesperson**  
Apprentice Locksmith (s)  
Apprentice Saw Maker and Repairer (s)  
Apprentice Watch and Clock Repairer (s)

### MINOR GROUP 43 ELECTRICAL AND ELECTRONICS TRADESPERSONS

ELECTRICAL AND ELECTRONICS TRADESPERSONS assemble, test and repair electrical and electronic systems, equipment and components.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Electrical and Electronics Tradespersons typically include examining and updating wiring and cable location diagrams; testing for, locating and repairing electrical malfunctions; cutting and connecting wiring and cables; assembling, fabricating and/or fitting electrical components using hand-held and power tools, and machinery; connecting electrical systems and appliances to power supply; joining air-conditioning ducting components; and filling refrigeration units with refrigerant.

Electrical and Electronic Engineering Associates and Technicians are excluded from this minor group because they are concerned more with the design and operation of complex electrical and electronic equipment than with its fabrication or maintenance. They are located in Unit Group 3201, Electrical and Electronic Engineering Associates and Technicians. Occupations involving the assembly and installation of simple electrical components on a production line are excluded because each involves only one phase in the manufacturing process and requires the performance of a narrow range of routine tasks. They are located in Minor Group 81, Trades Assistants and Factory Hands.

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

- 4301 ELECTRICAL POWERLINE TRADESPERSONS**
- 4303 ELECTRICAL FITTERS**
- 4305 AUTOMOTIVE ELECTRICIANS**
- 4307 REFRIGERATION AND AIR-CONDITIONING MECHANICS**
- 4309 ELECTRICAL MECHANICS**
- 4311 COMMUNICATIONS EQUIPMENT TRADESPERSONS**
- 4313 RADIO AND TELEVISION SERVICERS**
- 4315 OFFICE EQUIPMENT AND COMPUTER SERVICERS**
- 4399 OTHER ELECTRICAL AND ELECTRONICS TRADESPERSONS**

#### **4301 ELECTRICAL POWERLINE TRADESPERSONS**

ELECTRICAL POWERLINE TRADESPERSONS install, repair, maintain and monitor overhead and underground electric power distribution networks. They may supervise, or receive training in, occupations in this unit group.

##### **SKILL LEVEL**

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities issue licences for certain classes of work.

##### **TASKS include:**

- joining and splicing cables, and insulating wiring
- changing layout of cable systems
- testing cables to ensure quality of performance and adequacy of insulation
- installing and servicing aerial equipment
- laying, fixing and joining cross-layered polyethylene covered cable
- performing emergency repairs and de-energising of conductors

- maintaining location diagrams
- driving vehicles
- operating cranes and lifting devices
- installing of earth stakes, poles and guy wires
- digging of holes and trenches using hand and power tools

##### **OCCUPATIONS**

- 4301-01 Supervisor, Electrical Powerline Tradespersons**
- 4301-11 Electrical Linesman/woman**
- 4301-13 Electrical Cable Jointer**
- 4301-91 Apprentice Electrical Powerline Tradesperson  
Trainee Electrical Linesman/woman (a)**

**4303 ELECTRICAL FITTERS**

ELECTRICAL FITTERS assemble, install, test and maintain electrical equipment and components, and service and repair domestic and commercial electrical appliances and equipment. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities issue licences for certain classes of work.

**TASKS include:**

- examining blueprints, wiring diagrams and specifications
- measuring and laying out installation reference points
- fabricating or modifying metal parts and assembling components using lathes, drilling machines, hand tools and welding equipment
- selecting, cutting and connecting wire or cable to terminals or connectors
- lubricating bearings and moving parts of mechanisms
- repairing or replacing faulty wiring and defective parts
- reassembling and test-operating unit

**OCCUPATIONS**

**4303-01 Supervisor, Electrical Fitters**

**4303-11 Electrical Equipment Fitter**  
Armature Winder (s)  
Electrical Instrument Fitter (s)  
Heavy Coil Winder (s)

**4303-13 Electrical Appliance Servicer**

**4303-91 Apprentice Electrical Fitter**

**RELATED OCCUPATIONS**

4213-11 Precision Instrument Maker and Repairer  
4309-11 Electrical Mechanic

**4305 AUTOMOTIVE ELECTRICIANS**

AUTOMOTIVE ELECTRICIANS install, repair and maintain electrical wiring and components in automobiles. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities issue licences for certain classes of work.

**TASKS include:**

- installing gauges, alternators, capacitors, starter motors and other such electrical equipment
- connecting electrical accessories to power supply
- testing for and locating electrical malfunctions
- replacing defective items and parts
- repairing defective ignition and electrical wiring

**OCCUPATIONS**

**4305-01 Supervisor, Automotive Electricians**

**STRUCTURE AND GROUP DEFINITIONS**

**4305-11 Automotive Electrician**  
Automotive Electrical Fitter (a)

**4305-91 Apprentice Automotive Electrician**

**4307 REFRIGERATION AND AIR-CONDITIONING MECHANICS**

REFRIGERATION AND AIR-CONDITIONING MECHANICS assemble, install, service and repair refrigeration and air-conditioning units and systems. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities issue licences for certain classes of work.

**TASKS include:**

- measuring and laying out installation reference points
- installing refrigeration or air-conditioning components such as compressors
- installing compressors, motors, condensers, evaporators, switches, gauges and piping
- connecting piping and component parts to form complete circulatory system
- testing system for leaks using test gas or fluid and vacuum pumping equipment
- filling units with refrigerant
- servicing equipment, and testing for defects
- repairing or replacing defective parts, and recharging systems with refrigerant

**OCCUPATIONS**

**4307-01 Supervisor, Refrigeration and Air-Conditioning Mechanics**

**4307-11 Air-Conditioning Mechanic**  
Air-Conditioning Technician (a)

**4307-13 Refrigeration Mechanic**  
Refrigeration Fitter (a)

**4307-91 Apprentice Refrigeration and Air-Conditioning Mechanic**

**4309 ELECTRICAL MECHANICS**

ELECTRICAL MECHANICS install, maintain and repair electrical wiring and related equipment in houses, ships, trains, commercial and industrial sites and establishments. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities issue licences for certain classes of work.

**TASKS include:**

- examining wiring diagrams and installation areas to determine layout of wiring system
- positioning and installing electrical switchboards

## TRADESPERSONS

- measuring, cutting and installing conduit
- splicing wires by twisting and soldering
- connecting wires to circuit breakers, transformers, timers and other electrical equipment to complete circuit
- connecting power distribution system to power systems
- installing switches, light fittings and earthing systems
- testing circuits for safety, and checking for defects
- repairing or replacing defective components or systems

### OCCUPATIONS

- 4309-01 Supervisor, Electrical Mechanics**
- 4309-11 Electrical Mechanic**  
Electrician (a)  
Electrical Contractor (s)
- 4309-13 Electrician (Special Class)**
- 4309-91 Apprentice Electrical Mechanic**  
Apprentice Electrician (a)

## 4311 COMMUNICATIONS EQUIPMENT TRADESPERSONS

COMMUNICATIONS EQUIPMENT TRADESPERSONS install, maintain and repair external telecommunications equipment, telecommunications appliances, electronic broadcasting and telecine equipment and instruments and systems used for monitoring and process control. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate. State authorities issue licences for certain classes of work.

### TASKS include:

- erecting, testing and maintaining aerial wires
- installing underground cables for telephone, radio and computer transmission
- installing telephones in homes and computerised switchboards in office blocks
- installing alarm, radar, medical monitoring, two-way radio and computer systems
- dismantling and examining equipment
- locating defective components or circuitry using electronic testing instruments
- replacing or repairing defective components and parts, lines and cables
- assembling and soldering equipment

### OCCUPATIONS

- 4311-01 Supervisor, Communications Equipment Tradespersons**  
Telecommunications Line Supervisor (a)
- 4311-11 Broadcasting Tradesperson**  
Broadcasting Technician (a)
- 4311-13 Telecommunications Tradesperson**  
Telecommunications Technician (a)
- 4311-15 Telecommunications Line**

## GROUP DEFINITIONS

### Serviceman/woman

Telecommunications Lineman/woman (a)  
Radio Lineman/woman (s)  
Telecommunications Cable Jinter (s)

- 4311-91 Trainee Communications Equipment Tradesperson**  
Telecommunications Line  
Serviceman/woman-in-Training (s)  
Telecommunications  
Lineman/woman-in-Training (s)  
Telecommunications  
Technician-in-Training (s)  
Trainee Telecommunications  
Lineman/woman (s)

- 4311-99 Communications Equipment Tradespersons nec**  
Alarms Installer (s)

## 4313 RADIO AND TELEVISION SERVICERS

RADIO AND TELEVISION SERVICERS maintain and repair radio and television receivers, tape recorders, phonographs and video cassette recorders. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- observing reception to determine nature of malfunction
- performing voltage and resistance tests and waveform check using electronic testing equipment
- adjusting controls of colour receiver using colour bar generator
- examining motors of record turntables and tape recorders
- repairing or replacing defective parts

### OCCUPATIONS

- 4313-01 Supervisor, Radio and Television Servicers**
- 4313-11 Radio and Television Servicer**  
Radio and Television Repairer (a)  
Radio Mechanic (s)  
Television Mechanic (s)  
Video Technician (s)
- 4313-91 Apprentice Radio and Television Servicer**

## 4315 OFFICE EQUIPMENT AND COMPUTER SERVICERS

OFFICE EQUIPMENT AND COMPUTER SERVICERS install, service and repair computer hardware, vending machines, typewriters, calculating, adding and book-keeping machines, cash registers and other such office equipment. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

## GROUP DEFINITIONS

### TASKS include:

- dismantling machines and examining components
- adjusting, repairing and replacing worn or defective parts using hand tools and soldering equipment
- lubricating moving parts
- setting up test equipment to evaluate functional and operational performance and locate circuitry defects
- repairing and replacing defective wiring
- reassembling machinery

### OCCUPATIONS

- 4315-01 Supervisor, Office Equipment and Computer Servicers**
- 4315-11 Office Equipment Servicer**  
Business Equipment Mechanic (a)
- 4315-13 Computer Servicer**  
Computer Technician (a)
- 4315-91 Trainee Office Equipment and Computer Servicer**  
Apprentice Office Equipment and Computer Servicer (s)

## TRADESPERSONS

### 4399 OTHER ELECTRICAL AND ELECTRONICS TRADESPERSONS

This unit group covers occupations not elsewhere classified in Minor Group 43, Electrical and Electronics Tradespersons.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### OCCUPATIONS

- 4399-01 Supervisor, Other Electrical and Electronics Tradespersons**  
Supervisor, Lift Mechanics (s)
- 4399-11 Lift Mechanic**  
Lift Electrician (a)
- 4399-13 Vending Machine Servicer**  
Amusement Machine Mechanic (s)  
Poker Machine Servicer (s)
- 4399-99 Electrical and Electronics Tradespersons nec**  
Apprentice Electronic Instrumentation Tradesperson (s)  
Electronic Instrument and Control Tradesperson (s)  
Electronic Instrument Tradesperson (Complex Systems) (s)



## MINOR GROUP 44 BUILDING TRADESPERSONS

BUILDING TRADESPERSONS construct, install, and repair buildings, civil engineering structures, plumbing and theatrical sets; finish surfaces by tiling or applying sheet materials or liquids; and design and paint signs.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Building Tradespersons typically include examining plans and specifications; selecting appropriate materials, components and fittings; erecting scaffolding; cutting, mixing, assembling and/or applying materials and components to achieve desired effect, using a variety of hand-held, power and other tools; checking accuracy of work; repairing and replacing damaged fixtures and sections of structures and surfaces; and cleaning equipment and work area.

This minor group includes Joiners, although they work off site, because they construct fixtures which are installed as structural components of buildings.

Cabinetmakers are excluded from this minor group because the items they fabricate are not structural components of buildings. They are located in Unit Group 4903, Cabinetmakers.

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

- 4401 CARPENTERS AND JOINERS**
- 4403 BRICKLAYERS**
- 4405 PAINTERS, DECORATORS AND SIGNWRITERS**
- 4407 PLASTERERS**
- 4409 PLUMBERS**
- 4411 ROOF SLATERS AND TILERS**
- 4413 WALL AND FLOOR TILERS**

### 4401 CARPENTERS AND JOINERS

CARPENTERS AND JOINERS construct, erect, install, renovate and repair wooden structures and fixtures used in internal and external building frameworks, dams, bridges and theatrical sets. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate in carpentry and/or joining. State Licensing Boards may require self-employed tradespersons to be registered.

#### TASKS include:

- determining details of work from plans and specifications
- selecting appropriate timber and materials
- cutting timber to size using hand or power tools
- assembling and installing fixtures and structures
- checking the accuracy of work with a square rule and spirit level

#### COMMENTS

Materials other than wood may be used, such as plastic laminates, perspex and metals.

#### OCCUPATIONS

**4401-01 Supervisor, Carpenters and Joiners**

- 4401-11 Carpenter**  
Fixing Carpenter (s)  
Formwork Carpenter (s)  
Prop and Scenery Maker (s)  
Shop Fitter (s)
- 4401-13 Joiner**  
Joinery Patternmaker (s)  
Joinery Setter-out (s)
- 4401-91 Apprentice Carpenter and Joiner**  
Apprentice Carpenter (s)  
Apprentice Joiner (s)

#### RELATED OCCUPATIONS

- 4901 Wood Machinists and Turners
- 4903 Cabinetmakers
- 4905 Other Wood Tradespersons

### 4403 BRICKLAYERS

BRICKLAYERS lay bricks, stones, tiles and building blocks to construct and repair structures such as walls, foundations and arches; or equipment such as boilers, industrial ovens, furnaces, kilns and smelters. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate in bricklaying. State Licensing Boards may require self-employed tradespersons to be licensed.

**TASKS include:**

- examining plans and specifications
- erecting scaffolding and positioning supporting frames for brickwork
- spreading mortar over bricks, blocks or tiles and laying in place, removing excess mortar with trowel
- checking each row for vertical and horizontal alignment
- shaping bricks to fit irregular spaces
- spreading high heat plastic refractory mixes over exposed brickwork to prevent deterioration
- repairing and maintaining brick and related structures and equipment

**OCCUPATIONS**

**4403-01 Supervisor, Bricklayers**

**4403-11 Bricklayer**  
 Blocklayer (a)  
 Arch Builder (s)  
 Chimney Builder (s)  
 Refractory Bricklayer (s)  
 Retort Setter (Bricklaying) (s)  
 Tuckpointer (s)

**4403-91 Apprentice Bricklayer**

**4405 PAINTERS, DECORATORS AND SIGNWRITERS**

PAINTERS, DECORATORS AND SIGNWRITERS apply paint, varnish and other finishes to walls and ceilings, or cover them with paper, vinyl or fabrics, to protect and decorate surfaces of domestic, commercial and industrial buildings; or design and paint signs for displays, buildings and other structures. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate in painting, decorating and/or signwriting.

**TASKS include:**

- studying proposals, sketches or written instructions and conferring with client to confirm nature and style of work to be undertaken
- determining type and quantity of materials required
- erecting scaffolding and setting up brushes and equipment
- preparing surfaces by cleaning and sanding
- selecting and mixing paint or adhesive
- marking out and painting sign, wall or other surface using roller, spraygun or brush and metal stick
- cleaning and maintaining equipment and work area
- applying paper, vinyl, fabric or similar wall covering materials

**OCCUPATIONS**

**4405-01 Supervisor, Painters, Decorators and Signwriters**

**4405-11 Painter and Decorator**  
 Industrial Painter (Structures) (s)

**4405-13 Paperhanger**

**4405-15 Signwriter**  
 Signcraftsman/woman (a)

**4405-91 Apprentice Painter, Decorator and Signwriter**

**4407 PLASTERERS**

PLASTERERS apply plaster, cement or similar materials and fix fibrous sheets to the interior or exterior of domestic and commercial buildings. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate in plastering.

**TASKS include:**

- erecting scaffolding
- mixing plaster to desired consistency, applying and smoothing coats of plaster using a trowel and creating decorative textures in finish coats
- straightening corners, angles and surfaces
- finishing surfaces with acoustic, insulating and fireproofing materials
- determining fibreboard layout and installing insulation and vapour barriers
- measuring and marking surfaces to prepare them for fibreboard installation
- cutting fibreboard and fixing it in place, securing with metal corner beads
- covering joints and nail holes and finishing surface

**OCCUPATIONS**

**4407-01 Supervisor, Plasterers**

**4407-11 Solid Plasterer**  
 Cement Plasterer (a)  
 Cement Renderer (a)

**4407-13 Fibrous Plasterer**  
 Fibrous Plaster Fixer (a)  
 Fibrous Plaster Setter (a)  
 Plasterboard Fixer (a)

**4407-91 Apprentice Plasterer**

**4409 PLUMBERS**

PLUMBERS install and repair pipelines, plumbing and related equipment for water, gas, sewerage and other systems in residential, commercial and industrial establishments. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate in plumbing. Plumbers are registered by state authorities, and licensing may be obtained in various areas of plumbing after further study.

## TRADESPERSONS

### TASKS include:

- determining layout of pipeline systems and materials required from drawings and specifications
- locating and marking positions for connections, fixtures etc., and areas of trenches to be excavated
- cutting holes and excavating through floors and walls and directing excavation for tanks, sillage pits and transpiration beds
- measuring, cutting, threading and bending pipes
- welding, threading, cementing or soldering pipes together
- assembling and installing pipelines, connecting pipes to various components, equipment and appliances
- testing and adjusting lines, control mechanisms and sewerage systems
- ensuring compliance with relevant codes and by-laws

### OCCUPATIONS

- 4409-01 Supervisor, Plumbers**  
Supervisor, Drainers (s)  
Supervisor, Gas Fitters (s)
- 4409-11 Plumber (General)**  
Pipe Fitter (Plumbing) (s)  
Pipe Joiner (s)  
Roof Plumber (s)  
Sprinkler Fitter (s)
- 4409-13 Gasfitter**  
Gas-main and Line Fitter (a)  
Leadburner (s)  
Liquid Petroleum Gasfitter (s)  
Pinpointer (s)
- 4409-15 Drainer**  
Drain Cleaner (s)  
Septic Tank Installer (s)
- 4409-91 Apprentice Plumber**  
Apprentice Drainer (s)  
Apprentice Gasfitter (s)  
Apprentice Leadburner (s)  
Apprentice Sprinkler Fitter (s)

## 4411 ROOF SLATERS AND TILERS

ROOF SLATERS AND TILERS cover structures with roof tiles, sheets or shingles to form a waterproof surface. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate. State Licensing Boards may require self-employed tradespersons to be licensed.

## GROUP DEFINITIONS

### TASKS include:

- determining layout for tiles and materials required from drawings and specifications
- erecting ladders and scaffolding and securing waterproof sheets under eaves
- nailing or stapling roof underlay to roof
- aligning and securing starter row of roofing material, and laying successive overlapping layers
- cutting roofing material to fit around vents, chimney edges, ridges and corners
- fixing edge and ridge tiles in mortar or cement

### OCCUPATIONS

- 4411-01 Supervisor, Roof Slaters and Tilers**
- 4411-11 Roof Slater and Tiler**  
Roof Fixer (s)  
Roof Shingler (s)
- 4411-91 Apprentice Roof Slater and Tiler**

## 4413 WALL AND FLOOR TILERS

WALL AND FLOOR TILERS lay various types of tiles on external and internal walls and floors to provide a protective and decorative finish. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate. State Licensing Boards may require self-employed tradespersons to be licensed.

### TASKS include:

- examining plans, measuring and marking surface to be covered and laying out work
- preparing surface by removing old tile, grout and adhesive, and cleaning with soap and water
- spreading adhesive onto surface, setting tile in position and aligning it using level, square, plumb line and straight-edge
- cleaning tiles and removing excess grout

### OCCUPATIONS

- 4413-01 Supervisor, Wall and Floor Tilers**
- 4413-11 Wall and Floor Tiler**  
Wall and Floor Tile Fixer (a)  
Ceramic Tiler (s)  
Mosaic Tiler (s)  
Terrazzo Floor Layer (s)
- 4413-91 Apprentice Wall and Floor Tiler**

## MINOR GROUP 45 PRINTING TRADESPERSONS

PRINTING TRADESPERSONS prepare, set and duplicate type prior to printing, reproduce camera-ready copy onto film, plate, cylinder or screen printing stencil, set up and operate all types of printing machines, and bind and finish the printed products.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Printing Tradespersons typically include composing and making up pages for typesetting; making plastic or rubber moulds of formes for duplicates needed in multiple and/or long printing runs; treating film, plates, cylinders and moulds with chemicals; setting up, operating and monitoring machines used in typesetting, photographing copy, printing and cutting, folding, collating and binding printed material; finishing book covers and edges using hand tools; performing routine maintenance and minor repairs on machinery; and cleaning equipment.

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

- 4501 COMPOSITORS**
- 4503 GRAPHIC REPRODUCTION TRADESPERSONS**
- 4505 PRINTING MACHINISTS**
- 4507 BINDERS AND FINISHERS**
- 4509 STEREOTYPERS AND ELECTROTYPERS**
- 4511 SCREEN PRINTERS**

### 4501 COMPOSITORS

COMPOSITORS set and lay out type and other material by hand or machine prior to printing. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

#### TASKS include:

- planning and composing pages in metal, bromide or film
- setting up and operating keyboard controlled type-casting machines
- casting lines of type in hot metal and/or cold type
- entering and manipulating copy on visual display terminals of computerised phototypesetting systems
- processing output from computerised system to obtain image on bromide or film

#### OCCUPATIONS

- 4501-01 Supervisor, Compositors**
- 4501-11 Compositor  
Typesetter (s)**
- 4501-91 Apprentice Compositor**

### 4503 GRAPHIC REPRODUCTION TRADESPERSONS

GRAPHIC REPRODUCTION TRADESPERSONS prepare and develop film (in negative or positive form), printing plates or cylinders for gravure printing. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

#### TASKS include:

- operating photographic equipment to reproduce camera-ready copy onto film, plate or cylinder
- treating plates and cylinders chemically
- developing film positives or negatives or bromides
- chrome-plating and polishing plates and cylinders
- dot etching, retouching and correcting film
- printing and examining proofs to check quality and correcting where necessary

#### OCCUPATIONS

- 4503-01 Supervisor, Graphic Reproduction  
Tradespersons**
- 4503-11 Plate Preparer (Printing)  
Plate Maker(Printing) (a)  
Etcher-Finisher (Photo Engraving) (s)  
Flexographic Plate Maker (s)  
Gravure Plate Preparer (s)  
Letterpress Plate Maker (s)  
Lithographic Plate Preparer (s)  
Proofer-Finisher (Printing) (s)**

## TRADESPERSONS

- 4503-13 Cylinder Preparer (Printing)**  
Cylinder Reviser (s)  
Depositor and Grinder (s)  
Proofer (Printing) (s)
- 4503-15 Image Preparer (Printing)**  
Electronic Scanner Operator (Printing) (s)  
Process Camera Operator (Printing) (s)  
Retoucher and Planner (Printing) (s)
- 4503-91 Apprentice Graphic Reproduction Tradesperson**

## 4505 PRINTING MACHINISTS

PRINTING MACHINISTS set up and operate letterpress, lithographic, flexographic, gravure, newspaper, small offset or screen printing presses. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- preparing image material, photoengravings, stereotypes, electrotypes, hot metal type and/or printing plates
- setting and adjusting paper-feed mechanism, delivery mechanism, cylinders, inking and distributor rollers and other machine functions
- selecting, matching and mixing coloured inks and regulating paper and ink supply during print run
- monitoring machine operation and printing quality
- maintaining production records
- cleaning and maintaining, presses and performing minor repairs

### OCCUPATIONS

- 4505-01 Supervisor, Printing Machinists**
- 4505-11 Letterpress Printing Machinist**
- 4505-13 Lithographic Printing Machinist**
- 4505-15 Flexographic or Gravure Printing Machinist**
- 4505-17 Newspaper Press Machinist (Metropolitan)**
- 4505-19 Small Offset Printing Machinist**
- 4505-91 Apprentice Printing Machinist**

## 4507 BINDERS AND FINISHERS

BINDERS AND FINISHERS bind and/or finish books and printed products by hand or machine. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- binding books and repairing book bindings
- edge-gilding, bevelling, marbling or otherwise

## GROUP DEFINITIONS

- finishing book covers using hand tools
- folding, collating and sewing signatures (sheets) by hand or machine
- cutting and trimming paper using manual and automatic guillotines
- operating machines to bind and finish books and other printed products

### OCCUPATIONS

- 4507-01 Supervisor, Binders and Finishers**
- 4507-11 Binder and Finisher**  
Paper Guillotine Operator (Bookbinding) (s)
- 4507-91 Apprentice Binder and Finisher**

## 4509 STEREOTYPERS AND ELECTROTYPERS

STEREOTYPERS AND ELECTROTYPERS make duplicates of prepared formes (assemblages) of type and other material for long-run or multiple printing operations. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- pressing pliable rubber or plastic matrix against forme to make mould
- pouring molten metal into mould either by hand or casting machine
- trimming, shaving or levelling plate using hand tools or machines
- treating and electroplating moulds chemically
- maintaining plating baths and repairing damaged plates
- filing and storing matrices

### OCCUPATIONS

- 4509-01 Supervisor, Stereotypers and Electrotypers**
- 4509-11 Stereotyper and Electrotyper**
- 4509-91 Apprentice Stereotyper and Electrotyper**

## 4511 SCREEN PRINTERS

SCREEN PRINTERS make stencils either by hand or photographically for use by a screen printing machine or on a hand bench, print from stencil using machine or bench. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- designing work for hand-cut or photographic stencils
- hand-cutting stencils

## GROUP DEFINITIONS

## TRADESPERSONS

- tracing stencils from master sketches
- preparing photographic stencils
- applying stencils to screens
- operating a camera, preparing and exposing fine and coarse screen, half tone and line, wet and/or dry plate or film negatives and positives
- printing on paper or fabric using stencil, screen and ink, or dye-impregnated sponge or cloth, or using printing machine

### OCCUPATIONS

**4511-01 Supervisor, Screen Printers**

**4511-11 Screen Printer**  
Screen Printing Stencil Preparer (s)

**4511-91 Apprentice Screen Printer**

## MINOR GROUP 46 VEHICLE TRADESPERSONS

VEHICLE TRADESPERSONS repair motor vehicles, construct and paint specialised vehicle bodies, and fit or replace interior trim and upholstery in vehicles.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Vehicle Tradespersons typically include assessing faults and damage, and estimating repair and replacement costs; dismantling engines, or removing damaged panels or interior trim; repairing faulty parts using a variety of machines and hand-held tools; making and fitting replacement parts; painting repaired vehicle surfaces; and constructing, modifying, painting and upholstering specialised vehicle bodies.

This minor group includes trimmers who work on aircraft, train and boat upholstery because their tasks are similar to the tasks of those who work on road vehicles and are often performed by the same persons.

Occupations concerned with the manufacture of production-line vehicles are excluded from this minor group because each involves only one phase in the manufacturing process and requires the performance of a narrow range of routine tasks. They are located in Minor Group 81, Trades Assistants and Factory Hands. Vehicle Accessories Fitters are also excluded because they perform a narrow range of routine tasks. They are located in Unit Group 8923, Vehicle Accessories Fitters. Diesel Fitter-Mechanics are excluded because they fabricate replacement parts rather than installing pre-fabricated parts. They are located in Unit Group 4103, Metal Fitters and Machinists.

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

- 4601 VEHICLE MECHANICS**
- 4603 PANEL BEATERS**
- 4605 VEHICLE PAINTERS**
- 4607 VEHICLE BODY MAKERS**
- 4609 VEHICLE TRIMMERS**

### 4601 VEHICLE MECHANICS

VEHICLE MECHANICS maintain, test and repair motor vehicles, parts and sub-assemblies and repair small engines and other propulsion or associated systems in boats, motor cycles and like equipment. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities may issue licences for certain classes of work.

#### TASKS include:

- diagnosing faults by listening to engine or operating specialised testing equipment
- removing engine, transmission or differential assemblies using hand tools and lifting equipment
- dismantling assembly, checking parts
- repairing or replacing defective parts
- reassembling, testing and adjusting sub-assembly, reinstalling in vehicle
- tuning engine
- relining and adjusting brakes, replacing worn shock absorbers, changing oil and air filters, lubricating vehicle parts

### OCCUPATIONS

- 4601-01 Supervisor, Vehicle Mechanics**
- 4601-11 Motor Mechanic**  
Automotive Air-Conditioning Mechanic (s)  
Brake Mechanic (s)  
Diesel Motor Mechanic (s)
- 4601-13 Small Engine Mechanic**  
Lawnmower Mechanic (s)  
Motorcycle Mechanic (s)  
Outboard Motor Mechanic (s)
- 4601-91 Apprentice Motor Mechanic**  
Apprentice Brake Mechanic (s)  
Apprentice Diesel Motor Mechanic (s)  
Apprentice Motorcycle Mechanic (s)  
Apprentice Small Engine Mechanic (s)

### RELATED OCCUPATIONS

- 4103 Metal Fitter and Machinists
- 7303-13 Marine Engine and Boiler Operator

### 4603 PANEL BEATERS

PANEL BEATERS repair motor vehicle bodies and panels. They may supervise, or receive training in,



## GROUP DEFINITIONS

occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate. State authorities may issue licences for certain classes of work.

### TASKS include:

- removing damaged panels and parts or removing upholstery and accessories to gain access to damaged areas
- placing specially shaped metal tools against dented surface and pounding opposite surface with hammer to remove dents
- straightening badly damaged vehicles using mechanical and hydraulic equipment
- filling depressions with plastic filler, filing, grinding and sanding repaired surfaces

### OCCUPATIONS

4603-01 Supervisor, Panel Beaters

4603-11 Panel Beater

4603-91 Apprentice Panel Beater

## 4605 VEHICLE PAINTERS

VEHICLE PAINTERS prepare vehicle surfaces, mix paint colours and spray-paint vehicles. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- filing or chiselling rough spots
- sanding surfaces by hand or with electric sander
- covering areas not to be painted with masking tape and paper
- selecting or mixing paint shade to match existing vehicle colour
- applying primer and finish coats with spray-gun, rubbing down surface between coats
- removing masking papers, waxing and polishing finished paintwork

### OCCUPATIONS

4605-01 Supervisor, Vehicle Painters

4605-11 Vehicle Painter

4605-91 Apprentice Vehicle Painter

## 4607 VEHICLE BODY MAKERS

VEHICLE BODY MAKERS fabricate and repair specialised vehicle bodies including bus, fire engine,

## TRADESPERSONS

coach, carriage and wagon bodies. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- constructing framework sections in metal, wood, fibreglass or substitute materials using stretching and shrinking machinery and welding equipment
- bolting, screwing, rivetting or welding sections together to form complete framework
- cutting and shaping panels of sheetmetal, aluminium or reinforced plastic and attaching to framework using hand and power tools
- altering assembly line vehicles to special requirements

### OCCUPATIONS

4607-01 Supervisor, Vehicle Body Makers

4607-11 Vehicle Body Maker  
Vehicle Body Builder (a)  
Coach Builder (s)

4607-91 Apprentice Vehicle Body Maker

## 4609 VEHICLE TRIMMERS

VEHICLE TRIMMERS make, install, repair and replace the interior trimmings and upholstery of vehicles. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

### TASKS include:

- removing old coverings or fittings from vehicle and taking new measurements
- selecting and cutting pieces of fabric, vinyl or leather using shears or electrical tools
- sewing pieces together using heavy duty sewing machine
- installing lining, floor coverings and arm rests in vehicle
- attaching door trims, rubber seals, locks and handles

### OCCUPATIONS

4609-01 Supervisor, Vehicle Trimmers

4609-11 Vehicle Trimmer  
Vehicle Upholsterer (s)

4609-91 Apprentice Vehicle Trimmer

## MINOR GROUP 47 FOOD TRADESPERSONS

FOOD TRADESPERSONS perform the more complex tasks in various stages of the preparation of food, applying technical expertise and knowledge of the properties of food.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Food Tradespersons typically include slaughtering livestock and cutting carcasses into standard cuts of meat; milling grains; selecting, measuring, cutting up, mixing and shaping ingredients using various techniques and appliances; cooking foodstuffs using ovens, hotplates, grills and similar equipment, and chilling food, monitoring temperature and elapsed time throughout; and planning menus, considering factors of nutrition, taste, colour and texture.

Occupations involving the operation of a single food processing machine to perform one phase in the manufacturing process are excluded from this minor group. They are located in Unit Group 7431, Food Processing Machine Operators.

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

- 4701 MEAT TRADESPERSONS**
- 4703 BAKERS AND PASTRYCOOKS**
- 4705 COOKS**
- 4799 OTHER FOOD TRADESPERSONS**

### 4701 MEAT TRADESPERSONS

MEAT TRADESPERSONS slaughter livestock, cut, trim, select and prepare meat to be packed and sold to establishments (e.g. restaurants and smallgoods manufacturers) or to the public. They may supervise or receive training in, occupations in this group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate. A licence, permit or lease to operate is required by local government authorities.

#### TASKS include:

- slaughtering livestock (including poultry) in abattoirs
- cutting or sawing carcasses into manageable proportions
- cutting or trimming standard cuts of meat using hand tools or power equipment
- removing bones
- feeding boneless meat through roller cutter of cubing machine to cube or tenderise
- operating mincer (grinder), mixer, patty-forming or sausage-forming machinery
- seasoning, pickling or curing meat
- shaping and tying roasts and poultry

#### OCCUPATIONS

- 4701-01 Supervisor, Meat Tradespersons**  
Supervisor, Abattoir Workers (s)  
Supervisor, Smallgoods Makers (s)
- 4701-11 Butcher**
- 4701-13 Smallgoods Maker**

### 4701-15 Slaughterman/woman

- 4701-91 Apprentice Meat Tradesperson**  
Apprentice Butcher (s)  
Apprentice Slaughterman/woman (s)  
Apprentice Smallgoods Maker (s)

### 4703 BAKERS AND PASTRYCOOKS

BAKERS AND PASTRYCOOKS prepare and bake buns, cakes, bread loaves and rolls, and operate forming machines to make biscuits. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate. 2 years on-the-job training is the usual.

#### TASKS include:

- checking cleanliness and operation of equipment before production runs to ensure health and safety regulations are met
- weighing and mixing ingredients
- mixing, kneading, cutting, moulding and shaping dough by hand
- operating machines which roll and mould dough or cut biscuits
- adjusting moulding dies, cutters or rollers on machines
- co-ordinating the loading and unloading of ovens
- monitoring baking times, temperatures and appearance of products

## GROUP DEFINITIONS

### OCCUPATIONS

- 4703-01** Supervisor, Bakers and Pastrycooks
- 4703-11** Pastrycook  
Cake Decorator (s)
- 4703-13** Baker  
Doughmaker (s)
- 4703-15** Biscuit Maker
- 4703-91** Apprentice Baker and Pastrycook

### 4705 COOKS

COOKS plan menus, and prepare and cook food in catering, dining, domestic or other establishments. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate.

#### TASKS include:

- planning menus on the basis of available ingredients, preferred style, and customers' tastes
- requisitioning food, kitchen supplies and equipment
- examining foodstuffs to ensure quality
- preparing and cooking meat, fish, vegetables and other foods using a variety of methods
- seasoning food during cooking according to personal judgement, experience or recipes
- portioning food, adding sauces, gravies and garnishes
- cleaning or supervising cleaning of utensils, dishes, equipment and work area

### OCCUPATIONS

- 4705-01** Supervisor, Cooks  
Executive Chef (s)
- 4705-11** Chef  
Sous-Chef (s)
- 4705-13** Qualified Cook
- 4705-91** Apprentice Cook
- 4705-99** Cooks nec  
Domestic Cook (s)  
Shearers' Cook (s)

#### RELATED OCCUPATIONS

- 7431-27 Food Factory Cook  
8919 Kitchenhands

### 4799 OTHER FOOD TRADESPERSONS

This unit group covers occupations not elsewhere classified in Minor Group 47, Food Tradespersons.

#### SKILL LEVEL

The entry requirement for this unit group is a trade or apprenticeship certificate. A certificate or licence from an appropriate state authority may be required to

## STRUCTURE AND GROUP DEFINITIONS

## TRADESPERSONS

practise as a Buttermaker or Cheesemaker.

### OCCUPATIONS

- 4799-01** Supervisor, Other Food Tradespersons  
Supervisor, Buttermakers (s)  
Supervisor, Cheesemakers (s)  
Supervisor, Confectioners (s)  
Supervisor, Millers (s)
- 4799-11** Miller  
Stockfeed Miller (s)
- 4799-13** Buttermaker
- 4799-15** Cheesemaker
- 4799-17** Confectioner
- 4799-91** Apprentice, Other Food Trades  
Apprentice Buttermaker (s)  
Apprentice Cheesemaker (s)  
Apprentice Confectioner (s)
- 4799-93** Trainee Miller

## MINOR GROUP 48 AMENITY HORTICULTURAL TRADESPERSONS

AMENITY HORTICULTURAL TRADESPERSONS propagate and nurture plants, and establish and maintain gardens and surfaces on which sports are played.

Occupations in this minor group have a level of skill commensurate with a 4 year trade certificate, usually obtained by apprenticeship.

Tasks performed by Amenity Horticultural Tradespersons typically include preparing soil for planting; planting seeds, propagating plants by budding or grafting, and transplanting seedlings; fertilising soil at regular intervals; operating irrigation systems to water plants and turf; removing pests, weeds and garden debris, and treating diseased plants; maintaining turf or synthetic surfaces, and repairing or replacing damaged sections; preparing plants for sale in nurseries, and turf for sporting events; planning and constructing domestic garden and other landscapes; and recording dates and other details of plantings, yields and treatments.

Landscape Architects are excluded from this minor group because they are concerned solely with the design rather than the construction of landscapes. They are located in Unit Group 2201, Architects and Landscape Architects.

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

- 4801 NURSERYMEN/WOMEN**
- 4803 GREENKEEPERS**
- 4805 GARDENERS**

### 4801 NURSERYMEN/WOMEN

NURSERYMEN/WOMEN propagate and nurture trees, shrubs, ornamental and flowering plants in a plant nursery. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

#### TASKS include:

- preparing potting media or containers for planting
- selecting and planting seeds, bulbs or cuttings and propagating plants by budding and grafting
- recording soil mixtures, plantings, treatments, losses and yields
- watering plants and controlling automatic watering operations
- controlling pests, diseases, weeds and nutritional and environmental plant disorders
- selecting and packaging plants for presentation and delivery

#### OCCUPATIONS

- 4801-01 Supervisor, Nurserymen/women**  
Supervisor, Plant Nursery (s)
- 4801-11 Nurseryman/woman**  
Plant Propagator (a)
- 4801-91 Apprentice Nurseryman/woman**

### 4803 GREENKEEPERS

GREENKEEPERS establish fine turf and lawns and maintain grassed or synthetic surfaces used for sport. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

#### TASKS include:

- mowing, rolling and levelling turf using hand or power driven equipment
- installing, maintaining and operating irrigation and drainage systems
- repairing green damage and controlling pests, diseases and weeds
- installing nets, posts and stumps, marking out lines and logos to prepare ground for play

#### OCCUPATIONS

- 4803-01 Head Greenkeeper**  
Head Groundsman/woman (a)  
Golf Course Superintendent (s)  
Sporting Facility Curator (s)
- 4803-11 Greenkeeper**  
Groundsman/woman (a)
- 4803-91 Apprentice Greenkeeper**

**4805 GARDENERS**

GARDENERS cultivate and maintain plants, plan and construct gardens, landscapes, inspect and treat plants to improve their health and appearance. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate or a 3 year diploma in landscape gardening. Up to 1 year on-the-job training is usual for Tree Surgeons.

**TASKS include:**

- drawing and interpreting plans and preparing landscape construction schedules
- estimating and ordering landscaping materials
- planting and transplanting lawns, flowers, shrubs and trees
- mowing lawns using hand or power driven mowers
- pruning, fertilising and watering plants and controlling pests and diseases
- constructing garden features and facilities
- felling trees and lopping limbs using chain or hand saws
- treating damaged or diseased trees with protective materials

**OCCUPATIONS**

- 4805-01 Head Gardener**  
Supervisor, Landscape Gardeners (s)
- 4805-11 Gardener (General)**
- 4805-13 Landscape Gardener**  
Landscape Horticulturist (a)
- 4805-15 Tree Surgeon**  
Arboriculturist (a)  
Tree Doctor (a)
- 4805-91 Apprentice Gardener**  
Apprentice Landscape Gardener (s)

## MINOR GROUP 49 MISCELLANEOUS TRADESPERSONS

This residual minor group covers occupations in Major Group 4, Tradespersons, which are not included in Minor Groups 41-48 above.

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

- 4901 WOOD MACHINISTS AND TURNERS
- 4903 CABINETMAKERS
- 4905 OTHER WOOD TRADESPERSONS
- 4907 MARINE CONSTRUCTION TRADESPERSONS
- 4909 BLASTING TRADESPERSONS
- 4911 GARMENT TRADESPERSONS
- 4913 UPHOLSTERERS AND BEDDING TRADESPERSONS
- 4915 SHOEMAKING AND REPAIRING TRADESPERSONS
- 4917 OTHER LEATHER AND CANVAS TRADESPERSONS
- 4919 FLOOR COVERERS
- 4921 GLASS TRADESPERSONS
- 4923 JEWELLERY AND PRECIOUS METALWARE TRADESPERSONS
- 4925 CRAFTWORKERS
- 4927 HAIRDRESSERS
- 4929 SHEEP SHEARERS
- 4931 ANIMAL TRAINERS
- 4999 OTHER TRADESPERSONS

### 4901 WOOD MACHINISTS AND TURNERS

WOOD MACHINISTS AND TURNERS set up and operate woodworking machines and wood turning lathes to shape wood stock. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate. For Wood Machinists (B-Grade) and Wood Machinists (C-Grade) 6-12 months and 1-2 months on-the-job training respectively is usual.

#### TASKS include:

- determining job requirements from drawings, specifications, work orders or sample parts
- installing selected cutting edge or drill bit in woodworking machine
- installing guides, fixtures or jigs to table or bed of machine, adjusting angle and height of table and adjusting feed rollers to control movement of workpiece
- operating machine to cut, plane, shape and sand workpiece
- positioning wood stock in wood turning lathe, and adjusting turning speed of lathe
- placing selected chisel in contact with rotating wood stock to cut and shape workpiece

#### OCCUPATIONS

- 4901-01 Supervisor, Wood Machinists and Turners

- 4901-11 Wood Machinist (A-Grade)  
Automatic Profile Sander Operator (s)  
Copy Lathe Operator (s)  
Double-End Tenoner Operator (s)  
Edge Bander Operator (s)  
Jig Maker (Wood) (s)  
Panel Saw Operator (s)  
Program Router Cutter (s)  
Woodworking Machine Setter (s)

- 4901-13 Wood Turner  
Wood Turning Lathe Operator (s)

- 4901-15 Wood Machinist (B-Grade)

- 4901-17 Wood Machinist (C-Grade)

- 4901-91 Apprentice Wood Machinist

- 4901-93 Apprentice Wood Turner

### 4903 CABINETMAKERS

CABINETMAKERS fabricate and assemble wooden parts to make and repair furniture. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- determining job requirements from drawings or other specifications and selecting wood and/or prepared furniture parts
- marking out, cutting and shaping wood using saws, chisels, planes, powered hand tools and woodworking machines to form furniture parts
- fitting parts together to form sections of furniture using glue, clamps, nails, dowels or screws
- assembling sections of furniture to form completed article
- fitting hinges, locks, catches, drawers and shelves
- repairing damaged furniture and cabinets

**OCCUPATIONS**

**4903-01 Supervisor, Cabinetmakers**

**4903-11 Cabinetmaker**  
 Antique Furniture Reproducer (s)  
 Antique Furniture Restorer (s)  
 Chairmaker (s)  
 Coffin Maker (s)  
 Couchmaker (s)  
 Custom Furniture Maker (s)

**4903-91 Apprentice Cabinetmaker**

**4905 OTHER WOOD TRADESPERSONS**

OTHER WOOD TRADESPERSONS carve designs in wood, apply finishes to furniture, make picture frames, models or barrels from wood or make cane furniture. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- carving ornamental designs in wood for furniture, panelling and other decorative purposes using gauges, knives, chisels and mallet or other hand tools and woodworking machines
- cutting out and assembling mouldings to make picture frames using hand and power tools
- assembling wooden staves to make barrels, casks and vats using metal or wooden hoops, tressing machines and hand tools
- preparing furniture for finishing or refinishing using solvents and abrasive materials
- applying stains, varnish, paint and other finishes to furniture, and polishing and waxing surfaces
- constructing full size or scale models of production line items using measuring instruments and woodworking tools and machines
- shaping and joining cane rods and weaving cane around structure to make furniture using clamps, shaping device, hand tools and fasteners

**OCCUPATIONS**

**4905-01 Supervisor, Other Wood Tradespersons**  
 Supervisor, Cane Furniture Makers (s)  
 Supervisor, Coopers (s)  
 Supervisor, Furniture Finishers (s)  
 Supervisor, Picture Framers (s)  
 Supervisor, Wood Carvers (s)

**4905-11 Wood Carver**

- 4905-13 Picture Framer**  
 Picture Frame Maker (a)
- 4905-15 Cooper**
- 4905-17 Cane Furniture Maker**
- 4905-19 Furniture Finisher**  
 Furniture Polisher (a)  
 French Polisher (s)
- 4905-21 Model Maker**
- 4905-91 Apprentice, Other Wood Trades**  
 Apprentice Cane Furniture Maker (s)  
 Apprentice Cooper (s)  
 Apprentice Furniture Finisher (s)  
 Apprentice Model Maker (s)  
 Apprentice Picture Framers (s)  
 Apprentice Wood Carver (s)

**4907 MARINE CONSTRUCTION TRADESPERSONS**

MARINE CONSTRUCTION TRADESPERSONS fabricate, install and repair structural sections and components of ships and boats. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- constructing templates of ship or boat parts to be fabricated
- marking lines and reference points on dry dock, slipway or layout floor and on material used for fabrication of boat parts
- preparing slipway for construction of ship or boat
- assembling shell of boat or erecting hull sections of ship and temporarily securing them
- building and/or installing masts, booms, decking and other structures and fittings
- repairing, or removing and replacing, damaged plating and other faulty units, fittings and accessories

**OCCUPATIONS**

**4907-01 Supervisor, Marine Construction Tradespersons**

**4907-11 Shipwright**  
 Loftsmen/woman (Marine) (s)  
 Metal Liner-off (s)  
 Ship's Carpenter (s)

**4907-13 Boat Builder and Repairer**

**4907-91 Apprentice Marine Construction Tradesperson**  
 Apprentice Boatbuilder (s)  
 Apprentice Ship's Carpenter (s)  
 Apprentice Shipwright (s)



**4909 BLASTING TRADESPERSONS**

BLASTING TRADESPERSONS assemble, position and detonate explosives. They may supervise occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a vocational certificate and 2-3 years previous experience as a Labourer in a related occupation. 6-12 months on-the-job training is usual. Authorities issue shot-firer's and explosives handling licences.

**TASKS include:**

- positioning explosives in bore holes and priming, or directing other workers to prime, explosives using detonators and explosive cartridges
- connecting wire, fuse or detonating cord to explosive cartridge and detonator and wire to electric detonator
- filling and tamping holes with rock dust, sand or other materials
- firing electric detonator or lighting fuse to detonate explosives
- inspecting blasting area before and after explosion to ensure safety
- removing material broken by explosion from areas of underground mine inaccessible to high production equipment

**OCCUPATIONS**

**4909-01 Supervisor, Blasting Tradespersons**

**4909-11 Shot-firer  
Blaster (a)  
Powder Monkey (a)  
Seismograph Shooter (s)**

**4909-13 Stope Miner**

**4911 GARMENT TRADESPERSONS**

GARMENT TRADESPERSONS prepare patterns and materials for the making of garments and make garments, including fur garments and hats. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate or a 2 year certificate in fashion. Some occupations also require 1-4 years previous experience in a related area.

**TASKS include:**

- drafting master patterns of garments from sketches, sample articles or design specifications
- cutting out patterns for a range of garment sizes using drafting instruments, scissors or perforating machines
- cutting out parts of garment, hat or fur, according to pattern using portable electric cutter, hand shears or fur cutting knife to cut through layers
- sewing fabric or fur parts together and sewing buttonholes using needle and thread or sewing machine
- attaching buttons and other fasteners
- making hats by shaping, wiring, sewing, gluing and blocking material using needle and thread, sewing

machine, steamer and hand iron.

- measuring customer's size and drafting original pattern or altering existing pattern of garment to fit customer

**OCCUPATIONS**

**4911-01 Supervisor, Garment Tradespersons  
Supervisor, Dressmakers (s)  
Supervisor, Furriers (s)  
Supervisor, Tailors (s)  
Wardrobe Co-ordinator (s)**

**4911-11 Tailor**

**4911-13 Dressmaker  
Seamstress (a)  
Apparel Sample Hand (s)  
Wardrobe Assistant (s)**

**4911-15 Apparel Cutter**

**4911-17 Furrier  
Fur Cutter (s)  
Fur Matcher (s)**

**4911-19 Patternmaker-Grader (Textiles)**

**4911-21 Hat Maker  
Milliner (s)**

**4911-91 Apprentice Garment Tradesperson  
Apprentice Tailor (s)**

**RELATED OCCUPATIONS**

4913 Upholsterers and Bedding Tradespersons  
4917 Other Leather and Canvas Tradespersons

**4913 UPHOLSTERERS AND BEDDING TRADESPERSONS**

UPHOLSTERERS AND BEDDING TRADESPERSONS cover furniture and bed spring units with fabric or other material and repair furniture. They may supervise, or receive training in, occupations in this unit group.

**SKILL LEVEL**

The entry requirement for this unit group is a trade certificate.

**TASKS include:**

- measuring and cutting covering material for furniture using measuring tape and scissors or shears
- joining sections of covering material and seaming cushions using sewing machines
- tacking covering material onto furniture frame
- tacking, gluing or sewing ornamental trim, braids and buttons to material or frame
- fabricating bed springs using coiling machine
- forming frame using machine to shape edge wire
- attaching springs to frame using fastening gun
- stapling spring unit to box frame
- encasing bed spring unit and padding with selected covering material using staple gun or closing machine
- replacing covering, webbing, padding and springs to repair upholstered furniture

## GROUP DEFINITIONS

### OCCUPATIONS

- 4913-01 Supervisor, Upholsterers and Bedding Tradespersons
- 4913-11 Furniture Upholsterer
- 4913-13 Bedding and Mattress Maker
- 4913-91 Apprentice Upholsterer and Bedding Tradesperson

### 4915 SHOEMAKING AND REPAIRING TRADESPERSONS

SHOEMAKING AND REPAIRING TRADESPERSONS cut out, shape and join parts of shoes and repair shoes. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

#### TASKS include:

- cutting shoe parts from leather or other material using knife, scissors or machine which stamps die onto material
- joining, decorating and reinforcing shoe parts using single, double or multiple stitching machine
- stretching upper part of footwear over last using machine or lasting tool to shape upper part
- joining upper to insole using tacking device or adhesive
- sewing edge on insole
- sewing or cementing outer sole to edge
- trimming and buffing shoe using knife and buffing wheel
- applying dye to shoe
- polishing shoe using rotating power brush
- repairing or refinishing shoes

#### OCCUPATIONS

- 4915-01 Supervisor, Shoemaking and Repairing Tradespersons
- 4915-11 Shoemaker  
Bespoke Shoemaker (s)  
Clicker (s)  
Laster (s)  
Surgical Shoemaker (s)
- 4915-13 Shoe Repairer
- 4915-91 Apprentice Shoemaker and Repairer  
Apprentice Clicker (s)

### 4917 OTHER LEATHER AND CANVAS TRADESPERSONS

OTHER LEATHER AND CANVAS TRADESPERSONS make and repair products made from leather or canvas and similar materials or prepare sailcloth for sewing. They may supervise, or receive training in, occupations in this unit group.

## TRADESPERSONS

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

#### TASKS include:

- marking out and cutting sailcloth or canvas and similar materials from pattern using hand shears or power cutters
- joining parts of leather articles using rivets, handsewing, tools, sewing machine or adhesive
- dyeing, staining and polishing leather articles
- sewing sections of canvas and similar materials together to make awnings, tents, tarpaulins, horse rugs, caravan annexes or other products using sewing machine
- punching holes in canvas and similar materials using mallet and punch and attaching grommets, metal fittings and fastenings to product by machine or hand sewing
- calculating dimensions of sail and allowances for hemming and stretching using sail calculation tables and sail specification computer card
- drawing full size pattern of sail and supervising final sewing of sail

### OCCUPATIONS

- 4917-01 Supervisor, Other Leather and Canvas Tradespersons
- 4917-11 Leather Goods Maker  
Saddler (s)
- 4917-13 Canvas Goods Maker
- 4917-15 Sailmaker
- 4917-91 Apprentice, Other Leather and Canvas Trades  
Apprentice Canvas Goods Maker (s)  
Apprentice Leather Goods Maker (s)  
Apprentice Sailmaker (s)

### 4919 FLOOR COVERERS

FLOOR COVERERS install carpet, linoleum, vinyl, cork tiles and other floor coverings, except ceramic tiles, slate and stone. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

#### TASKS include:

- examining area to be covered to ensure that floor is firm, dry and clean
- measuring and marking off area with layout
- fixing underlays of hardboard sheets, rubber or felt
- laying covering material over floor
- cutting shapes around permanent obstructions, matching adjacent patterns and trimming edges
- removing baseboard moulding trim to install edges of coverings

### OCCUPATIONS

- 4919-01 Supervisor, Floor Coverers  
Supervisor, Carpet Layers (s)

## TRADESPERSONS

**4919-11 Floor Coverer**  
Carpet Layer (s)  
Floor Finisher (s)

**4919-91 Apprentice Floor Coverer**

## 4921 GLASS TRADESPERSONS

GLASS TRADESPERSONS cut, finish and install glass panes. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

### TASKS include:

- scoring glass surface using cutting tool
- breaking glass along scored line using notched tool or glass pliers
- fitting and installing glass panes and mirrors and assembling prefabricated glass units
- blowing through pipe to inflate gob of molten glass
- rotating pipe while blowing to attain shape and size of glass object
- joining tubing or extending parts of object by reheating using specialised hand tools

### OCCUPATIONS

**4921-01 Supervisor, Glass Tradespersons**

**4921-11 Flat Glass Tradesperson**  
Glass Beveller (s)  
Glass Cutter (s)  
Glass Embosser (s)  
Glass Etcher (s)  
Glass Silverer (s)  
Glazier (s)

**4921-13 Glass Blower**  
Glass Bender (s)  
Glass Blowing Lathe Operator (s)

**4921-91 Apprentice Flat Glass Tradesperson**

**4921-93 Trainee Glass Blower**

## 4923 JEWELLERY AND PRECIOUS METALWARE TRADESPERSONS

JEWELLERY AND PRECIOUS METALWARE TRADESPERSONS make fashion or industrial jewels from rough gemstones and make and repair precious metal and complete jewellery articles using precision hand and power tools. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a trade certificate.

### TASKS include:

- studying rough stone using magnifying glass and marking out cutting guidelines
- cleaning stone, securing in jig, operating lathe, grinding wheel or rotating disc to shape and smooth surface and cut facets

## GROUP DEFINITIONS

- cutting blanks from metal sheet
- shaping blanks by annealing, heating or spinning on spinning lathe
- preparing wax mould for article or metal mounting and pouring molten metal into mould
- assembling jewellery by soldering, brazing, rivetting or bolting, and finishing by filing or buffing
- checking article against specifications using precision measuring instruments
- repairing jewellery and worn metalware by soldering, replacing or remaking damaged parts, annealing or heating

### OCCUPATIONS

**4923-01 Supervisor, Jewellery and Precious Metalware Tradespersons**

**4923-11 Jeweller**  
Gem Setter (s)  
Ring Maker (s)

**4923-13 Gem Cutter and Polisher**  
Diamond Cutter (s)  
Faceter (s)  
Lapidary (s)  
Opal Polisher (s)

**4923-15 Precious Metal Smith**  
Goldsmith (s)  
Silversmith (s)

**4923-91 Apprentice Jewellery and Precious Metalware Tradesperson**  
Apprentice Diamond Cutter (s)  
Apprentice Jeweller (s)  
Apprentice Silversmith (s)

### RELATED OCCUPATIONS

4213-13 Watch and Clock Maker and Repairer

## 4925 CRAFTWORKERS

CRAFTWORKERS make, maintain and repair objects which have both functional and aesthetic qualities. They may supervise, or receive training in, occupations in this unit group.

### SKILL LEVEL

The entry requirement for this unit group is a 1-2 year vocational certificate.

### TASKS include:

- designing style and shape of object to meet both functional and aesthetic requirements
- manipulating materials to make objects according to design
- finishing object to impart aesthetic qualities
- maintaining objects to ensure they are in working order
- repairing damaged or defective craft objects

### OCCUPATIONS

**4925-01 Supervisor, Craftworkers**  
Supervisor, Musical Instrument Makers and Repairers (s)  
Supervisor, Potters (s)

**4925-11 Piano Tuner**

**4925-13 Potter**

## GROUP DEFINITIONS

- 4925-91 Apprentice Craftworker**  
Apprentice Musical Instrument Maker and  
Repairer (s)  
Apprentice Piano Tuner (s)  
Apprentice Potter (s)
- 4925-99 Craftworkers nec**  
Leadlighter (s)  
Musical Instrument Maker (s)  
Stringed Instrument Repairer (s)

### 4927 HAIRDRESSERS

HAIRDRESSERS cut, style and treat hair. They may supervise, or receive training in, occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is a trade certificate. Authorities issue licences for certain types of work.

#### TASKS include:

- discussing hair style with customer, taking into account customer's requirements
- cutting hair using scissors, razor or electric clippers
- washing, tinting, streaking, permanent-waving hair and applying conditioner or other treatments
- styling or straightening hair using brush, comb, rollers, clips, curling iron and blow dryer
- arranging appointments
- collecting payments
- cleaning work area and instruments

#### OCCUPATIONS

- 4927-01 Supervisor, Hairdressers**
- 4927-11 Hairdresser**  
Barber (s)
- 4927-91 Apprentice Hairdresser**

### 4929 SHEEP SHEARERS

SHEEP SHEARERS shear wool from sheep using either mechanically driven handpiece or blade shears, and maintain and repair shearing equipment. They may supervise occupations in this unit group.

#### SKILL LEVEL

The entry requirement for this unit group is 2 years previous experience as a Shearing Shed Hand. 6 months on-the-job training is usual.

#### TASKS include:

- inspecting and lubricating equipment and ensuring that shearers' stands are fully equipped
- removing sheep from catching pen
- selecting shearing comb to suit sheep type
- shearing sheep closely avoiding cuts to skin of animal or to wool
- removing fleece in one piece for picking up and handling

## STRUCTURE AND GROUP DEFINITIONS

## TRADESPERSONS

- treating cuts and returning sheep to release pen

#### OCCUPATIONS

- 4929-01 Overseer, Shearing Shed**  
Shearing Contractor (s)
- 4929-03 Shearing Shed Expert**
- 4929-11 Shearer**

### 4931 ANIMAL TRAINERS

ANIMAL TRAINERS direct and participate in the breaking and training of horses for riding or racing, the training of dogs for racing or guiding the blind, and training other animals to perform for public entertainment.

#### SKILL LEVEL

The entry requirement for Dog and Horse Trainers is a 1-2 year certificate in Animal Handling and 3-4 years experience as a Stable Hand or Animal Attendant. The entry requirement for Horse Breaker is 2-3 years experience as a Stockman.

#### TASKS include:

- planning and supervising training schedule
- feeding, grooming and exercising animals or supervising other workers in the performance of these duties
- examining and treating animals for minor illnesses or injuries
- bridling, saddling and accustoming race horses to reins and rider
- harnessing and hitching harness racing horses and teaching them to pull sulkies

#### OCCUPATIONS

- 4931-11 Horse Breaker**
- 4931-99 Animal Trainers nec**  
Dog Trainer (s)  
Horse Trainer (s)

### 4999 OTHER TRADESPERSONS

This unit group covers occupations not elsewhere classified in Minor Group 49, Miscellaneous Tradespersons.

#### OCCUPATIONS

- 4999-01 Supervisor, Other Tradespersons**
- 4999-11 Dental Technician**  
Dental Mechanic (a)  
Dental Prosthetist (a)  
Orthodontic Technician (s)
- 4999-13 Optical Mechanic**  
Ophthalmic Lens Surfacers and Fitter (a)  
Optical Technician (a)  
Optical Dispenser (s)
- 4999-15 Stonemason**  
Monumental Mason (s)  
Stone Fixer (s)

## TRADESPERSONS

## GROUP DEFINITIONS

- 4999-17 Motion Picture Projectionist**
- 4999-19 Saturation Technician**
- 4999-21 Offshore Diver**
  - Clearance Diver (s)
  - Saturation Diver (s)
- 4999-23 Onshore Diver**
  - Shallow Water Diver (a)
  - Abalone Diver (s)
  - Pearl Diver (s)
  - Police Diver (s)
- 4999-25 Florist**
- 4999-27 Aircraft Safety Equipment Worker**
  - Parachute Rigger (s)
- 4999-29 Military Explosives Technician**
  - Ammunition Technician (s)
  - Armament Fitter (s)
  - Armament Mechanic (s)
  - Explosive Ordnance Demolition Technician (s)
- 4999-91 Apprentice, Other Trades**
  - Apprentice Dental Mechanic (s)
  - Apprentice Florist (s)
  - Apprentice Optical Mechanic (s)
  - Apprentice Stonemason (s)
- 4999-99 Tradespersons nec**
  - Chainsaw Mechanic (s)