

SmartJOBinfo

Training manual

February, 2005

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Introduction

Why create *SmartJOBinfo* reports?

The three *SmartJOBinfo* reports presented in this training manual were originally developed as part of the *Skilling Solutions Queensland* (SSQ) initiative. The objective of the initiative is to provide a new integrated training and employment service.

The purpose of the *SmartJOBinfo* reports is to provide information to assist with more informed employment and training decisions.

It is hoped that access to greater job market information will lead to a better match between supply and demand in the job market, between those seeking employment or training and those seeking persons to fill vacancies.

When the supply of jobseekers outnumbered available job opportunities, those in search of jobs may find it difficult to obtain work. Conversely, when available job opportunities outnumber jobseekers, employers may find it hard to obtain people with appropriate skills. Consequently, jobseekers with appropriate skills may have less difficulty securing employment for these jobs.

Now that *SmartJOBinfo* is being used in SSQ offices around the state to support a better match between the supply of and demand for skills, the benefit of placing this information on the department's internet site and making it accessible to an even wider population is evident.

How to use this training manual

The purpose of this training manual is to demystify the information presented in the *SmartJOBinfo* reports. It is written in plain English and is easy to use.

In broad terms, the manual is broken into three sections. The first is an overview. It explains the occupational structure on which the reports are based, outlines the nature of each report and discusses issues associated with sample surveys.

The second is a guide explaining how to interpret the data presented in the reports. Each report and data item is discussed separately using the same easy-to-read format and referencing, as an aid to comprehension, the same occupation: Metal Fitters and Machinists.

The third section is a wrap-up of everything discussed in the second section. It brings the separate analyses together into an overall assessment of Metal Fitters and Machinists.

The third section is followed by appendices including a glossary.

Overview

Occupational Search

The 340 occupations available for selection in the Occupational Search drop-down box are from the *Australian Standard Classification of Occupations (ASCO) Second Edition*. This classification structure was developed by the Australian Bureau of Statistics (ABS).

The ASCO is a skill-based classification of occupations covering all jobs in the Australian workforce. You might even call it a job dictionary. It covers the skills, tasks, training requirements and specialisations for any given occupation. Each occupation in the classification is given a code and a name. The coding structure is hierarchical. At the broadest level, occupations are grouped into nine one-digit categories (see the table below).

One-digit ASCO Code	One-digit ASCO Name
1	Managers and Administrators
2	Professionals
3	Associate Professionals
4	Tradespersons and Related Workers
5	Advanced Clerical and Service Workers
6	Intermediate Clerical, Sales and Service Workers
7	Intermediate Production and Transport Workers
8	Elementary Clerical, Sales and Service Workers
9	Labourers and Related Workers

Each of these nine one-digit categories is then broken down into a range of two-digit categories and so on. At its most detailed level, the ASCO is broken down into 986 specific six-digit occupations. For example, for Metal Fitters and Machinists, the hierarchical structure is shown on the following page.

Australian Standard Classification of Occupations Hierarchical Structure for Metal Fitters and Machinists

One-digit ASCO	Two-digit ASCO	Three-digit ASCO	Four-digit ASCO	Six-digit ASCO	
4	Tradespersons and Related Workers	41	Mechanical and Fabrication Engineering Tradespersons	411	Mechanical Engineering Tradespersons
			4111	General Mechanical Engineering Tradespersons	
			4112	Metal Fitters and Machinists	
				411201 Supervisor, Metal Fitters and Machinists	
				411211 Fitter	
				411213 Metal Machinist (First Class)	
				411215 Textile, Clothing or Footwear Mechanic	
				411281 Apprentice Fitter	
				411283 Apprentice Metal Machinist	
				411285 Apprentice Textile, Clothing or Footwear Mechanic	
			4113	Toolmakers	
			4114	Aircraft Maintenance Engineers	
			4115	Precision Metal Tradespersons	
		412	Fabrication Engineering Tradespersons		
			42	Automotive Tradespersons	
			43	Electrical and Electronics Tradespersons	
			44	Construction Tradespersons	
			45	Food Tradespersons	
			46	Skilled Agricultural and Horticultural Workers	
			49	Other Tradespersons and Related Workers	

The *SmartJOBinfo* reports are based on occupations at the four-digit ASCO level. Each report is for a separate four-digit occupation. The name for this four-digit occupation is listed at the top of the report in each case.

Occupations at the four-digit level were chosen because the one-, two- and three-digit level descriptors were too broad. For example, a client seeking job information at an SSQ centre will probably want to obtain information on bricklayers or carpenters (four-digit ASCO) rather than on 'Construction Tradespersons' (two-digit ASCO).

Six-digit descriptors, whilst more detailed, were not chosen due to insufficient data. For example, the time series data graphed in the *Job Trends Brief* is only available down to four-digit occupations.

A listing of the 340 four-digit occupational descriptors is provided in Appendix A (attached). A small number of these descriptors are too broad to be of real value, for example, 'Computing Professionals'.

Persons seeking labour market information are more likely to inquire about System Analysts or Programmers than they are Computing Professionals. Where your inquiry involves an occupation not listed in the Occupational Search box, use the attached list to locate the corresponding four-digit name that *is used* in the drop-down Occupational Search box. Excerpts from the attached list are provided in the table below:

Occupations covered by *SmartJOBinfo* reports

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Aboriginal and Torres Strait Islander Education Worker	Education Aides	6311
Aboriginal and Torres Strait Islander Health Worker	Aboriginal And Torres Strait Islander Health Workers	3493
Accountant	Accountants	2211
Accounts Clerk	Accounting Clerks	6141
Actor	Actors, Dancers And Related Professionals	2538
Actors, Dancers and Related Professionals nec	Actors, Dancers And Related Professionals	2538
Actuary	Mathematicians, Statisticians And Actuaries	2293
Acupuncturist	Natural Therapy Professionals	2394
Admissions Clerk	Inquiry And Admissions Clerks	6191
Advertising Specialist	Marketing And Advertising Professionals	2221
Aeronautical Engineer	Other Building And Engineering Professionals	2129
Aged or Disabled Person Carer	Special Care Workers	6313
Agricultural Adviser	Environmental And Agricultural Science Professionals	2114
Agricultural and Horticultural Labourers nec	Other Agricultural And Horticultural Labourers	9929
Agricultural and Horticultural Mobile Plant Operator	Other Mobile Plant Operators	7119
Agricultural Engineer	Other Building And Engineering Professionals	2129
Agricultural Scientist	Environmental And Agricultural Science Professionals	2114
Agricultural Technical Officer	Science Technical Officers	3112

In cases where your inquiry relates to an occupation grouped with other occupations under the one non-specific four-digit ASCO descriptor, the *Job Snapshot* report will provide job descriptions for each occupation in the group. For example:

Other Intermediate Clerical Workers Description

DEBT COLLECTORS collect payments for overdue accounts, overdue instalments or damage claims on behalf of creditors. Tasks for this occupation include:

- visit or telephone debtors to collect amounts due or to arrange for payments to be made, trace addresses of debtors who have moved
- record amounts collected and note further action required, recommend legal action when collection cannot be made
- prepare statements of account for creditors or arrange for money collected to be transferred to their accounts

MAIL SUPERVISORS supervise and coordinate the activities of mail processing staff. COURT OFFICERS provide operational support to courts and registries. Tasks for these occupations include:

- Mail Supervisors determine work requirements and allocate duties to Mail Sorting Clerks, Messengers and Sales Assistants (Postal Services)
- oversee the work of the mail unit and suggest improvements and changes, maintain attendance records and rosters
- Court Officers open and close court and hearing room proceedings, maintain order in court, hearing rooms and adjacent areas
- organise jury and witness lists, summon and swear-in juries and witnesses, announce cases and call witnesses,
- post court lists on notice boards, allocate rooms for use by legal practitioners, sort and deliver court records and mail to chambers

TRAVEL and CODING CLERKS translate narrative descriptions or numeric information into classification or record systems. Tasks for these occupations include:

- assign classification codes according to set procedures
- optimise coding input and quality
- may provide advice to users of data

PROOF READERS read draft copies and proofs, detect errors and mark corrections to grammar, typing or composition. Tasks for these occupations include:

- read draft copies, mark proofs using codes to indicate deviations from copy or instruct operators to alter typographic details
- discuss grammatical or compositional errors in copy with authors, and obtain signatures on copy authorising changes
- sign and date proofs to indicate approval of corrections and authorise preparation of type for printing

For a more detailed job description please speak to the customer service officer.

In some cases, the job description covering these related occupations is too long to fit in the one-page *Job Snapshot* report. Where this situation arises, an abridged description is included in the report. This description finishes with the comment: 'For a more detailed job description please speak to the customer service officer.' Remembering that *SmartJOBinfo* was initially developed to support the SSQ initiative, this instruction was included to direct jobseekers to SSQ customer service officers in cases where more detailed descriptions are required. The descriptions are included in the file entitled *Further Information.doc* that accompanies the *SmartJOBinfo* software.

A complete listing of the ASCO is available from the following link:

<http://www.abs.gov.au/Ausstats/abs@.nsf/66f306f503e529a5ca25697e0017661f/5c244fd9d252cfc8ca25697e00184d35!OpenDocument>

SmartJOBinfo reports

Three separate reports (or briefs) can be selected for each occupation. Each report is one page in length.

1. *Job Snapshot*

This report provides a job description – including associated tasks – and training requirements. In addition, graphs, giving a basic snapshot of the occupation, are also provided. The snapshot should answer some fundamental inquiries regarding the nature of the job – for example, the gender breakdown and the full-time/part-time shares.

2. *Job Trends Brief*

This report shows how different features of the occupation (for example, the number of persons employed, full-time hours worked) have changed, and are projected to change, over time. These features (or indicators) have been chosen to provide an idea of the level of demand for the occupation. As a general rule, the greater the demand, the greater the job opportunities.

3. *Regional Snapshot*

This report provides a geographical overview of the occupation based on ABS regions called Statistical Divisions. A map of Queensland showing Statistical Divisions is included in the *Regional Snapshot*. At a glance, it is possible to see where in Queensland most people in a particular occupation are employed as well as the regions where job growth has occurred.

The reports draw information from a range of different data sources. These include:

Source	Data used in reports
The Department of Employment and Workplace Relations (DEWR)	Job descriptions, tasks, training requirements and the graph based on the <i>Skilled Vacancy Survey</i>
Monash Centre of Policy Studies	Graph showing employment projections
ABS	All other graphs

There are two types of ABS data used in the reports: statistics obtained from the *Census of Population and Housing* and statistics obtained from sample surveys.

Census data

The *Census of Population and Housing* is conducted every five years. ABS representatives contact every household in Australia and ask questions about everyone living in each household. The information obtained from this large and time-consuming

collection process is very accurate. However, it continues to lose its currency until the next Census is held. This loss of currency primarily applies to the raw numbers (for example, the number of motor mechanics employed in Queensland) and less to the proportions (the percentage of the Queensland workforce working as motor mechanics). Furthermore, it is very costly to run a census of the entire Australian population (this explains why the *Census of Population and Housing* is only run every five years). The *Regional Snapshot* is based on proportions derived from the *Census of Population and Housing* (Censuses used in the *SmartJOBinfo* reports were those conducted in 2001 and 1996). As a consequence, the information in this report bears relevance today.

Survey data

Sample surveys are often run in place of a full census because surveys are less expensive and not as time-consuming. However, as a general rule, figures derived from surveys are not as accurate as those obtained from a census. This is because only a sample (or small group) of the entire population is covered by the survey. Statistics for the entire population are then estimated based on applying weights to the figures collected from the survey.

For example, in an effort to improve ratings, a television station may be interested in discerning whether most people want to watch rugby league matches on Friday nights during the NRL season. The station may choose to survey the opinions of 1,000 Australians. While this number seems large, it is only a fraction of the entire population. The survey is likely to produce different results depending on the cross-section of people surveyed. If most of those surveyed are football enthusiasts, it is highly likely the results of the survey will suggest that Australians think Friday night football a good thing. However, if the persons contacted by the station did not watch much sport, the general consensus may be quite different. For the survey results to be truly representative of what all television-watching Australians think, those surveyed need to have similar characteristics to all television-watching Australians. Choosing a representative sample is not a simple task. And even if the sample has been picked wisely, the results may still be unrepresentative if some sample members do not respond.

The ABS takes great care in choosing representative samples for its surveys. Nevertheless, survey results are estimates. The accuracy of the estimates (in terms of how close these are to the actual figures that would have been obtained if a census were run) is dependent on a number of factors. The size of the sample is one: as a general rule, larger samples lead to more accurate estimates. Another is the size of the estimate. Smaller estimates tend to be less accurate than larger ones.

The impact of these and other factors is reflected in the graphs and is especially evident in the time series graphs (*Job Trends Brief*). The estimates, in particular those relating to occupations in which fewer people are employed, have a tendency to jump around. It is sometimes possible to smooth this 'jumpiness' or volatility by annualising the data, a process that involves deriving an average figure for the year. For example, occupational employment data derived from the *Labour Force Survey* is updated every quarter (February, May, August and November). Creating an annual employment figure involves adding four consecutive employment figures and then dividing by four.

While data graphed in the *SmartJOBinfo* reports has been annualised where possible, time series data for smaller occupations is still somewhat volatile. This volatility may make it difficult to accurately assess the story behind what is being presented and it is worthwhile using caution when interpreting the estimates displayed in some of the graphs. Nevertheless, the general direction of many trends should be discernable.

Interpreting the statements accompanying the graphs

A number of statements accompanying the graphs are automated. That is to say, formulas have been written that, in each case, choose a statement from a list of statements on the basis of the extent of change in, or difference between, the series plotted. For example, if, over time, change in employment is within a particular range (say +/- 5%) then a statement indicating that employment remained fairly steady will appear. If the change is outside this range, one of a number of other statements will appear. Therefore, if change in, or variance between, the two data items plotted in the one graph is only slightly different (but within the same range), the accompanying statements will indicate that the extent of the change is the same or that there is no difference.

The software driving the reports also contains formulae that write statements depending on whether certain conditions are met. Most of these formulae measure the level of volatility in the time series graphs in the Job Trends Brief. If this volatility clouds the overall direction of a series, a cautionary statement appears.

A more detailed explanation of each report and guidelines on how to interpret the data contained in each follows using Metal Fitters and Machinists as an example.

Interpreting the reports

Job Snapshot

Report overview – Job Snapshot

What is it?

- The *Job Snapshot* provides an overview of the selected occupation. Included in the report are the following:
 - The number of people employed in the occupation
 - Average number of people employed in each occupation
 - A description of the occupation including tasks performed
 - Male/female employment shares
 - Full-time/part-time employment shares
 - The top four employing industries
 - The full-time wage associated with the occupation
 - Training requirements for the occupation

Purpose

- The *Job Snapshot* should answer some fundamental inquiries regarding the job. At a glance it is possible to discern the male/female and full-time/part-time breakdown. By providing this and other essential information, a basic snapshot (or profile) of the selected occupation is compiled. Jobseekers, career advisors or those just wanting to understand the job market better will gain useful information from this report.

Data source(s)

- The *Job Snapshot* utilises a number of data sources. These are:

Source	Data used in report
DEWR	<ul style="list-style-type: none">• Job description and associated tasks• Training requirements
ABS <i>Labour Force Survey</i>	<ul style="list-style-type: none">• Number employed (selected occupation)• Average number employed (each occupation)• Employment shares by gender• Full-time/part-time employment shares
ABS <i>Census of Population and Housing</i>	<ul style="list-style-type: none">• Top four employing industries
ABS <i>Survey of Employee Benefits, Earnings and Trade Union Membership</i>	<ul style="list-style-type: none">• Full-time wages

Points to note

- Some of the figures on which the *Job Snapshot* is based are annual averages. The expression 'in the year to' a specific month is used to denote an annual average. Occupational data is collected by the ABS through its *Labour Force Survey* in February, May, August and November each year. The expression 'in the year to August 2004' refers to an average of the data collected in November 2003, February 2004, May 2004 and August 2004.
- See *Points to note* pertaining to each data item in this report.

Sample report

- The *Job Snapshot* report for Metal Fitters and Machinists follows.

Job Snapshot

Skilling Solutions Queensland

Metal Fitters and Machinists

In Queensland, the number of persons employed in this occupation in the year to August 2004 was:

21,600

By comparison, in the same period, the average number of persons employed in a single occupation in the Queensland workforce was 5480.

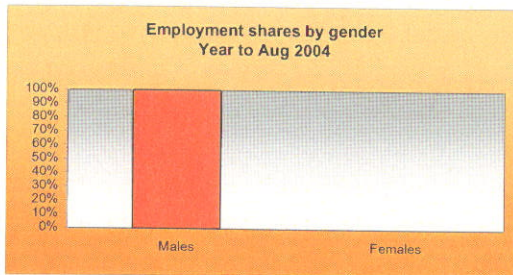
Description*

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 fabricated metal parts into products.

Tasks for these occupations include:

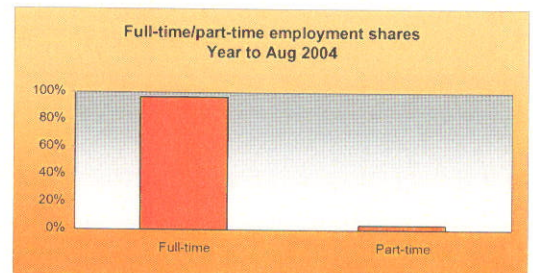
- study drawings or specifications to determine suitable material, method and sequence of operations, and machine settings
- set guides, stops and other controls on machining tools, set up prescribed cutting or shaping tools or dies in machines or presses, or set controls for textile machines
- form metal stock or castings to fine tolerances using machining tools to press, cut, grind, plane, bore or drill metal
- fit fabricated metal parts into products and assemble metal parts and sub-assemblies to produce machinery and equipment
- check fabricated and assembled metal parts for accuracy, clearance and fit using precision measuring instruments
- prepare pattern mechanisms to control the operation of textile machines used to spin, weave, knit, sew and tuft fabric

A snapshot for this occupation



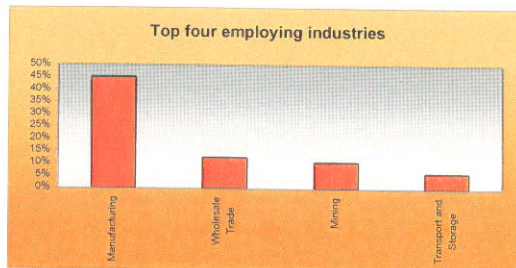
Source: ABS 6291.0

- Clearly, this is an occupation dominated by male workers.



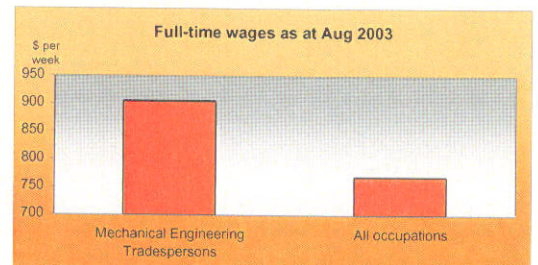
Source: ABS 6291.0

- Job opportunities in this occupation are predominantly for persons seeking full-time employment.



Source: ABS Census 2001

- The above graph displays the industries where most people in this occupation work.



Source: ABS 6310.0

- The above graph compares average weekly full-time wages for this and related occupations with average weekly full-time wages for all occupations.

- The information displayed in the graph should not be used to determine what a person can expect to earn in this type of job.

Training requirements*

Entry to these occupations is generally through an AQF Certificate III or higher qualification. In some instances relevant experience is required in addition to the formal qualification.

Disclaimer

This SmartJOBInfo report is based on information available at the time of compilation. The value of the data and analysis is therefore likely to diminish over time.

The Queensland Government, its officers, employees or agents disclaim responsibility for any loss howsoever caused, whether due to negligence or otherwise, arising from this report.



Number of people employed in the occupation

What is it?

- The number of Queenslanders employed in the selected occupation.
- This is compared to the average number of persons employed per occupation (listed in the Occupational Search box), a benchmark to measure size.

Purpose

- The employment size of the selected occupation is an indication of the significance of the other data items for that occupation. For example, the *Job Trends Brief* may suggest overall demand for an occupation. However, if this demand is for an occupation in which relatively few people work, there may still only be a small number of job opportunities. Nevertheless, depending on the supply of jobseekers with appropriate skills, the ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.

Data source(s)

- *ABS Labour Force Survey*

Points to note

- The number of persons employed is an annual average (see *Survey data*).

Interpretation of occupation size using Metal Fitters and Machinists as example

In Queensland, the number of persons employed in this occupation in the year to August 2004 was:	21,600	By comparison, in the same period, the average number of persons employed in a single occupation in the Queensland workforce was 5480.
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- In this example, a total of 21,600 Metal Fitters and Machinists were employed in the Queensland workforce in the year to August 2004. When compared with the average number of persons employed in any given occupation (5,480) it is evident that the metal fitting and machining workforce is sizeable. Consequently, if the *Job Trends Brief* indicates a demand for this occupation, this demand *may* translate into good job opportunities in the short term at least.

Job description

What is it?

- A short description of each occupation and the tasks required to perform successfully in that occupation.

Purpose

- Provides insight into the type of skills involved and helps jobseekers and careers advisers determine job suitability.

Data source(s)

- DEWR

Points to note

- In cases where the four-digit occupational name is too broad to be of any real relevance to SSQ clients, more detailed names and associated job descriptions and tasks are listed.
 - Additional job descriptions can be obtained from other websites including:
 - *Job Guide*, <http://jobguide.dest.gov.au>
 - *Job Outlook*, <http://www.jobsearch.gov.au/joboutlook>
 - *National Training Information Service (NTIS)*, <http://www.ntis.gov.au/>
 - *My Future* <http://www.myfuture.edu.au/>
- and more.

Example of job description using Metal Fitters and Machinists

Description

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 fabricated metal parts into products.

Tasks for these occupations include:

- study drawings or specifications to determine suitable material, method and sequence of operations, and machine settings
- set guides, stops and other controls on machining tools, set up prescribed cutting or shaping tools or dies in machines or presses, or set controls for textile machines
- form metal stock or castings to fine tolerances using machining tools to press, cut, grind, plane, bore or drill metal
- fit fabricated metal parts into products and assemble metal parts and sub-assemblies to produce machinery and equipment
- check fabricated and assembled metal parts for accuracy, clearance and fit using precision measuring instruments
- prepare pattern mechanisms to control the operation of textile machines used to spin, weave, knit, sew and tuft fabric

Employment shares by gender

What is it?

- A graph showing the proportions of males and females working in the selected occupation.
- Under each graph a statement describes the distribution of employment shares by gender.

Purpose

- Allows assessment of job opportunities based on the gender mix of the selected occupation. For example, an occupation dominated by males may not be appealing to many female jobseekers. Nonetheless, some female clients may believe greater job opportunities exist for females in such male-dominated occupations precisely because not many females are employed.

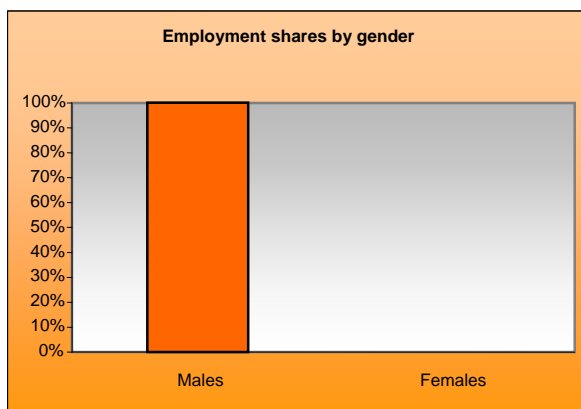
Data source(s)

- ABS *Labour Force Survey*

Points to note

- Employment shares are annual averages (see *Survey data*).
- Employment shares for males and females add to 100%.

Interpretation of graph using Metal Fitters and Machinists as example



Source: ABS 6291.0

- In this example males represent 100% of the metal fitting and machining workforce.
- The female component of the workforce is either nil or negligible.

- Clearly, this is an occupation dominated by male workers.

Full-time/part-time employment shares

What is it?

- A graph providing information on the mix of full-time and part-time workers (defined below) in the selected occupation.
 - Full-time workers are employed persons who usually worked 35 hours or more a week (in all jobs) and others who, although usually working less than 35 hours a week, worked 35 hours or more during the week of the survey.
 - Part-time workers are employed persons who usually worked less than 35 hours a week and who did so during the survey week.¹
- Under each graph a statement describes the distribution of persons employed on a full-time or part-time basis.

Purpose

- Allows assessment of whether job opportunities would be more likely for either full-time or part-time work.

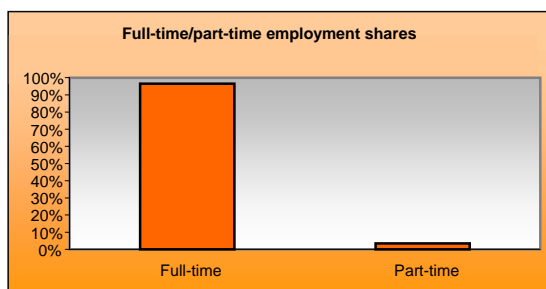
Data source(s)

- ABS *Labour Force Survey*

Points to note

- Employment shares are annual averages (see *Survey data*).
- Employment shares for part-time workers and full-time workers add to 100%.

Interpretation of graph using Metal Fitters and Machinists as example



Source: ABS 6291.0

- Job opportunities in this occupation are predominantly for persons seeking full-time employment.

- In this example, 97% of the metal fitting and machining workforce work full-time while only 3% work part-time.
- Consequently, there would be more opportunities for full-time positions.

¹ *Labour Force, Australia* (ABS Cat. no. 6203.0).

Top four employing industries

What is it?

- A graph showing the industries where most people in the selected occupation work.

Purpose

- Shows what industries are likely to provide most of the job opportunities for the selected occupation. Industries have a geographical component (for example, Mining is primarily located outside major metropolitan centres while the reverse is primarily true of Wholesale Trade) and this can influence career choices.

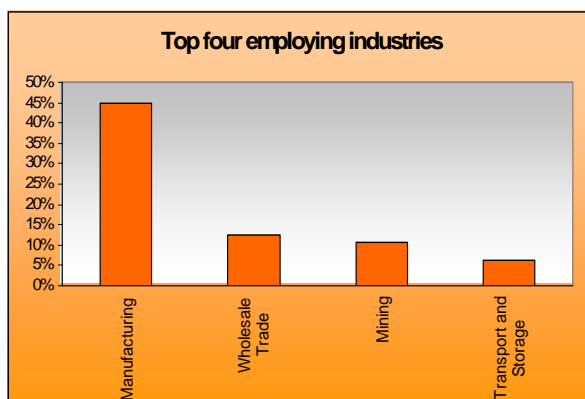
Data source(s)

- *Census of Population and Housing, 2001.*

Points to note

- Only the four most significant industries are shown in the graph.
- There are a total of 17 separate industry divisions (see *Appendix B*).
- The 17 industries (13 not shown) add to 100%.
- Even though this graph utilises data collected in 2001, the percentage shares shown therein are a good indication of the main industries in which the selected occupation is located.

Interpretation of graph using Metal Fitters and Machinists as example



Source: ABS Census 2001

- The graph shows that 45% of Metal Fitters and Machinists work in the Manufacturing industry. The next largest employing industry (in relation to this occupation) is Wholesale Trade (12% of Metal Fitters and Machinists), followed by Mining (11%) and Transport and Storage (6%). Therefore, nearly three-quarters of the metal fitting and machining workforce is employed in these four industries.
- The statement appearing below this graph is fixed and appears under each graph for the 340 occupations.

- The above graph displays the industries where most people in this occupation work.

Full-time wages

What is it?

- A graph showing the average weekly full-time wage earned in the three-digit (ASCO) occupational group covering the selected occupation compared to the average weekly full-time wage for all occupations taken together.

Purpose

- Shows how the average weekly full-time wage for the selected occupational group compares with the average wage for Australia. This type of information is integral to job-related inquiries.

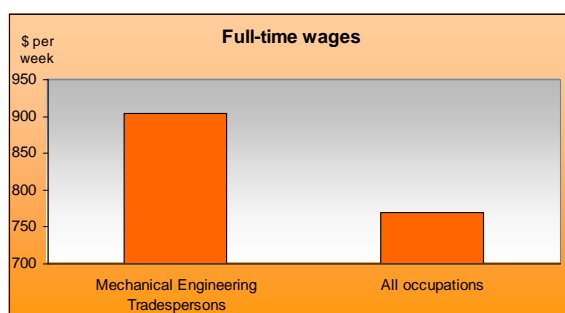
Data source(s)

- *ABS Survey of Employee Earnings, Benefits and Trade Union Membership*. This is a supplementary survey to the *Labour Force Survey*. Additional questions are asked to gain wages data.

Points to note

- The *Survey of Employee Earnings, Benefits and Trade Union Membership* is only run in August of each year. Consequently, it is not possible to develop annual averages to stabilise the data, i.e., smooth the volatility (See *Survey data*).
- Furthermore, the sample size is smaller than that used in the *Labour Force Survey* and this also serves to make the data more volatile. The sample does not include employers and own account workers (self-employed). In addition to increased volatility, wage data is likely to be more affected for occupations in which a greater proportion of persons in the excluded groups are working.
- To minimise these limitations, national three-digit ASCO data was graphed. As the average Queensland wage tends to be lower than the national average, use of national wage data will compensate for the effects of exclusion of employers and own account workers. Secondly, three-digit data will be more stable than four digit data. However, it should be noted that individual wages for four-digit occupations may vary from the three-digit average wage presented in the graph.
- As a consequence of the above caveats, the average wage displayed in the graph should not be used to determine what a person can expect to earn in the selected occupation. Moreover, jobseeker-specific characteristics such as skill level, experience and educational attainment will influence what a person earns.

Interpretation of graph using Mechanical Engineering Tradespersons as example



Source: ABS 6310.0

- The above graph compares average weekly full-time wages for this *and related* occupations with average weekly full-time wages for all occupations.
- The information displayed in the graph should not be used to determine what a person can expect to earn in this type of job.

- The statements supporting the graph are fixed (i.e. the same statements are used in each *Job Snapshot*) and draw attention to some of the limitations associated with the data.
- In this example, on average, persons employed full-time in the occupational group 'Mechanical Engineering Tradespersons' earn approximately \$905 per week. This compares with an average wage for all occupations of \$769 a week.

Training requirements

What is it?

- A short description of the type of education, training and experience required for entry into the selected occupation.

Purpose

- Is particularly useful to jobseekers and careers advisers as it allows them to see what training is needed for entry into the selected occupation. The level and length of training are considerations influencing a client's choice of career.

Data source(s)

- DEWR

Points to note

- More information about training programs is available at:
<http://www.jobsearch.gov.au/Training/>

Example of training requirements using Metal Fitters and Machinists as example

Training requirements*

Entry to these occupations is generally through an AQF Certificate III or higher qualification. In some instances relevant experience is required in addition to the formal qualification.

Job Trends Brief

Report overview – Job Trends Brief

What is it?

- The *Job Trends Brief* illustrates how different features of the selected occupation have changed, and are projected to change, over time. Included in the report are graphs displaying:
 - Change in employment (historical)
 - Change in average weekly hours per full-time worker
 - Change in employment (forecast)
 - Change in wages per full-time worker
 - Change in vacancies (skilled occupations only)

Purpose

- The above features (indicators) have been chosen to provide an idea of the changing level of demand for the selected occupation. As a general rule, the greater the demand, the greater the job opportunities.

Data source(s)

- The *Job Trends Brief* utilises a number of data sources. These are listed below:

Source	Data used in report
ABS Labour Force Survey	<ul style="list-style-type: none">• Change in employment (historical)• Change in average weekly hours per full-time worker
Monash Centre of Policy Studies	<ul style="list-style-type: none">• Change in employment (forecast)
ABS Survey of Employee Benefits, Earnings and Trade Union Membership	<ul style="list-style-type: none">• Change in wages per full-time worker
DEWR	<ul style="list-style-type: none">• Change in vacancies (skilled occupations only)

Points to note

- It is not possible to determine the ease with which a person will find a job in the selected occupation based solely on the information in the *Job Trends Brief*. This will be affected by a multitude of factors including jobseeker-specific characteristics such as skill level, experience and educational attainment.
- In this report, the intent is to show trends rather than actual numbers. Four of the five graphs are index graphs while the fifth shows percentage change. An index is a useful type of graph as it enables comparison of underlying trends for series of different orders of magnitude (size). For example, graphing, over time, the total number of persons employed in Queensland (1.9 million approximately) with employment for an occupation in which only a few thousand work would result in the time series line for the occupation not being discernable. An index works by bringing the first observation, in the different series being plotted, to 1.
- See *Points to note* pertaining to each data item in this report.

The *Job Trends Brief* for Metal Fitters and Machinists follows.

Job Trends Brief

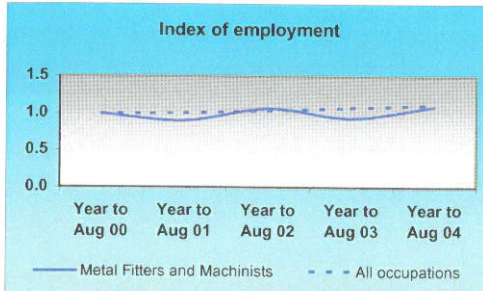
Skilling Solutions Queensland

Metal Fitters and Machinists

The statistics graphed in this report show how different features of the occupation (i.e., employment, full-time hours worked) have changed, and are projected to change, over time. These features (or indicators) have been chosen to provide an idea of the level of demand for the occupation. As a general rule, the greater the demand, the greater the job opportunities.

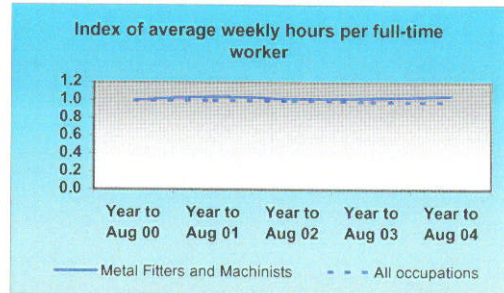
However, it is not possible to determine the ease with which a person may secure a job in the occupation as this depends on a multitude of factors. Furthermore, caution should be used when interpreting the graphs as some of the graphs are based on estimates rather than actual figures.

Trends for this occupation



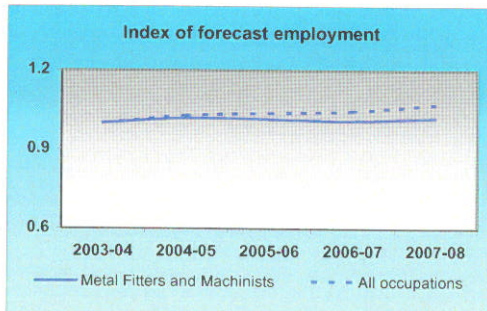
Source: ABS 6291.0

- Employment for this occupation has grown moderately in recent years.
- Over the same period, the Queensland workforce increased moderately.



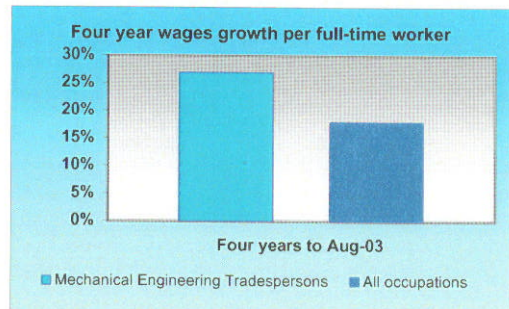
Source: ABS 6291.0

- Average weekly full-time hours for this occupation remained relatively steady over the above period.
- Over this time, average weekly full-time hours for the Queensland workforce remained relatively steady.



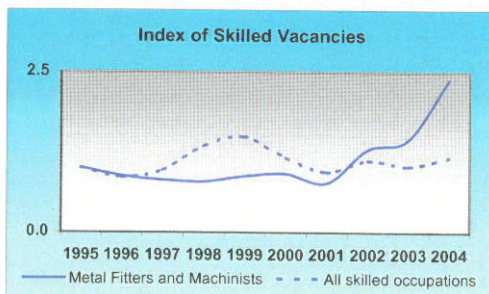
Source: Monash

- Employment for this occupation is projected to remain relatively steady over the next few years.
- Over the same period, total Queensland employment is projected to increase moderately.



Source: ABS 6310.0

- In recent years, the average full-time wage increased moderately.
- Over the same period, full-time wage growth was stronger for this occupation.
- The above graph compares wages growth per full-time worker for this and related occupations with growth in the average full-time wage. It does not display the wage for this occupation (see Job Snapshot).



Source: DEWR

- It should be noted that the Skilled Vacancy Survey (SVS) does not cover all occupations. Furthermore, as a general rule, the job advertisements monitored by the survey for any given occupation will only be a subset of all vacancies for that occupation.
- Despite the fact that the job advertisements monitored by the SVS fluctuated over time, the above index recorded a significant increase in advertised positions for this occupation in the period shown.
- Over the same timeframe, the SVS recorded a moderate increase for total skilled vacancy activity.

Disclaimer

This SmartJOBInfo report is based on information available at the time of compilation. The value of the data and analysis is therefore likely to diminish over time.

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Change in employment (historical)

What is it?

- A graph showing, over a recent four-year period, change in employment for the selected occupation compared to the Queensland workforce (average).
- Under the graph, statements describe the direction of change for the two series.

Purpose

- Shows the level of jobs growth for the occupation relative to average jobs growth. Notwithstanding fluctuations in the time series, a trend line with steeper upward gradient than the line for the Queensland workforce indicates proportionally greater job opportunities (resulting from growth).

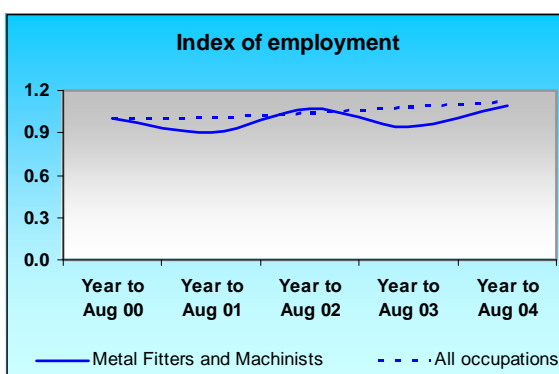
Data source(s)

- ABS *Labour Force Survey*

Points to note

- Occupations not showing strong historical jobs growth may still provide good job opportunities. This situation can arise when employers' demand for skills is restricted by an undersupply of suitably skilled jobseekers.
- Job opportunities also arise when persons leave the occupation.
- Reference to the number of persons employed in the selected occupation (see *Job Snapshot* report) will help to quantify the significance of any growth. However, the ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.
- Graph is an index and does not show actual employment numbers (see *Report overview – Job Trends Brief*).

Interpretation of graph using Metal Fitters and Machinists as example



- While undulating, the line showing change in the number of Metal Fitters and Machinists indicates that the occupation has been growing at a rate close to the average growth rate for Queensland.
- Considering employment trends in the Manufacturing industry, this is a good result.

Source: ABS 6291.0

- Employment for this occupation has grown moderately in recent years.
- Over the same period, the Queensland workforce increased moderately.

Change in average weekly hours per full-time worker

What is it?

- A graph showing, over a recent four-year period, change in average weekly hours per full-time worker for the selected occupation compared to the Queensland workforce (average).
- Under the graph, statements describe the direction of change for the two series.

Purpose

- Allows assessment of demand for the selected occupation based on changes in average weekly hours per full-time worker. The idea here is that when the demand for skills starts to outstrip labour supply, average weekly full-time hours will tend to increase as employers place more demands on the existing workforce.

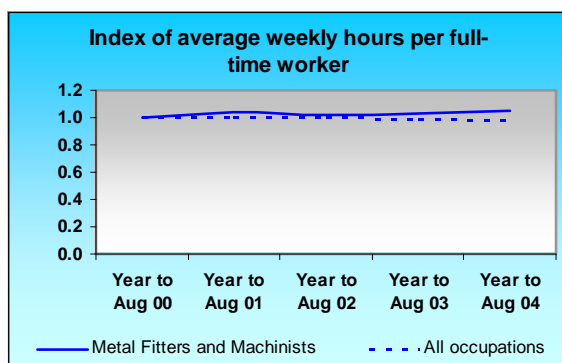
Data source(s)

- *ABS Labour Force Survey*

Points to note

- Part-time workers were excluded from the time series as these workers tend to mask the demands placed on the existing workforce as a result of an undersupply of suitable labour.
- Reference to the number of persons employed in the selected occupation (see *Job Snapshot* report) will help to quantify the significance of any growth. However, the ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.
- Graph is an index and does not show actual full-time hours worked (see *Report overview – Job Trends Brief*).

Interpretation of graph using Metal Fitters and Machinists as example



Source: ABS 6291.0

- Average weekly full-time hours for this occupation remained relatively steady over the above period.
- Over this time, average weekly full-time hours for the Queensland workforce remained relatively steady.

- In this example, both series remained fairly stable over the period.
- Nevertheless, average weekly hours worked by full-time Metal Fitters and Machinists rose slightly in relation to the average weekly hours worked by the Queensland workforce.
- This may indicate an undersupply of suitably skilled Metal Fitters and Machinists.

Change in employment (forecast)

What is it?

- A graph showing change in projected employment for the selected occupation compared to the Queensland workforce (average).
- Under the graph, statements describe the direction of change for the two series.

Purpose

- Allows assessment of projected future jobs growth for the selected occupation relative to future average jobs growth. Notwithstanding fluctuations in the time series, a trend line with a steeper upward gradient than the line for the Queensland workforce indicates proportionally greater future job opportunities (resulting from growth).

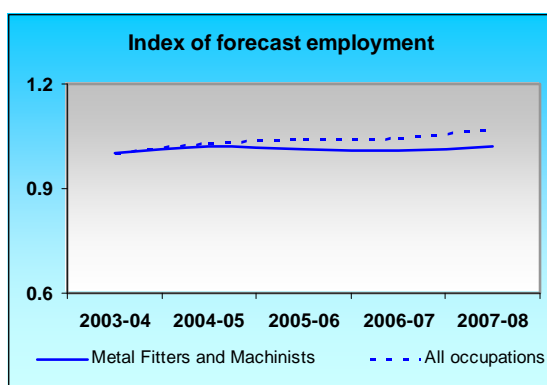
Data source(s)

- Monash Centre of Policy Studies

Points to note

- While sometimes derived from models based on historical trends and complex statistical techniques, all forecasts are nevertheless educated guesswork. As a consequence, the further into the future, the less reliable the forecast.
- Job opportunities also arise when persons leave the occupation.
- Reference to the number of persons employed in the selected occupation (see *Job Snapshot* report) will help to quantify the significance of any growth. However, the future ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.
- Graph is an index and does not show projected employment numbers (see *Report overview – Job Trends Brief*).

Interpretation of graph using Metal Fitters and Machinists as example



Source: Monash

- Employment for this occupation is projected to remain relatively steady over the next few years.
- Over the same period, total Queensland employment is projected to increase moderately.

- In this example, the index for the metal fitting and machining workforce is projected to remain relatively steady over the next few years while Queensland workforce is projected to grow moderately.
- As a consequence, Metal Fitters and Machinists are projected to represent a smaller share of total employment.

Change in wages per full-time worker

What is it?

- A graph showing, over a recent four-year period, changes in the average weekly full-time wage for the selected occupation (and related occupations) relative to the average weekly full-time wage for the Australian workforce.
- Under the graph, statements describe the extent of wages change for both data items.

Purpose

- Allows assessment of demand for the selected occupation (and related occupations) based on changes in average weekly full-time wages. The idea here is that when demand for skills starts to outstrip labour supply, average weekly full-time wages will tend to increase as employers attempt to attract additional workers.

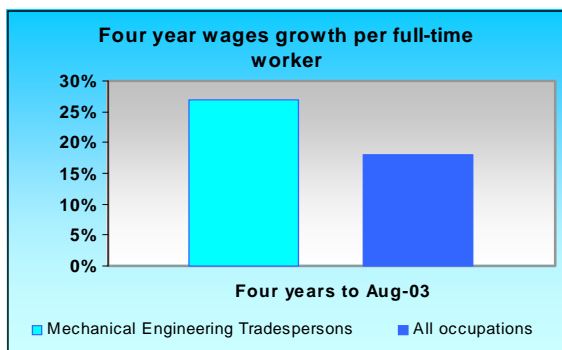
Data source(s)

- ABS *Survey of Employee Earnings, Benefits and Trade Union Membership*. This is a supplementary survey to the *Labour Force Survey*. Additional questions are asked to gain wages data.

Points to note

- Part-time wages were excluded from the graph as these tend to mask wages growth resulting from an undersupply of suitable labour.
- Reference to the number of persons employed in the selected occupation (see *Job Snapshot* report) will help to quantify the significance of any growth. However, the ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.
- Graph shows percentage change in average weekly full-time wages. Smaller than average wages growth does not necessarily mean a lower than average wage. Estimated average weekly full-time wages are available in the *Job Snapshot* report.
- See further dot points under *Full-time wages* section of *Job Snapshot*.

Interpretation of graph using Mechanical Engineering Tradespersons as example



Source: ABS 6310.0

- In this example, 27% growth in the full-time wage for Mechanical Engineering Tradespersons was well above growth in the average wage (18%).
- This above average growth may indicate demand for persons with metal fitting and machining skills.

- In recent years, the average full-time wage increased moderately.
- Over the same period, full-time wage growth was stronger for this occupation.
- The above graph compares wages growth per full-time worker for this *and related* occupations with growth in the average full-time wage. It does not display the wage for this occupation (see *Job Snapshot*).

Change in vacancies (skilled vacancies only)

What is it?

- A graph showing change, over an extended period, in advertised job vacancies (monitored by the *Skilled Vacancy Survey*) for the selected occupation compared to all skilled vacancies monitored by the survey.
- Under the graph, statements describe the direction of change for the two series.

Purpose

- Allows assessment of demand for the occupation relative to all skilled occupations based on changes in skilled vacancies. Notwithstanding fluctuations in the time series, a trend line with a steeper upward gradient than the line for all skilled occupations indicates proportionally greater job opportunities.

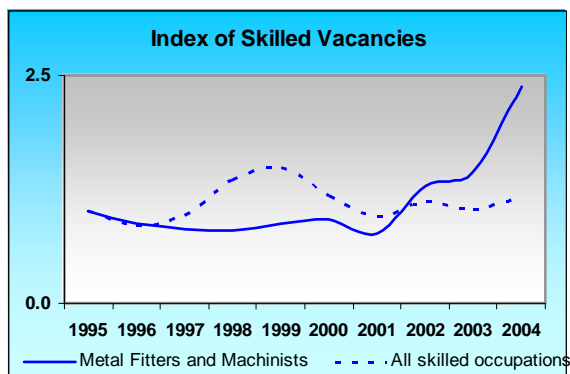
Data source(s)

- DEWR *Skilled Vacancies Survey*

Points to note

- The *Skilled Vacancy Survey* does not cover all occupations. Furthermore, as a general rule, the job advertisements monitored by the survey for any given occupation, will only be a subset of all vacancies for that occupation.
- Reference to the number of persons employed in the selected occupation (see *Job Snapshot* report) will help to quantify the significance of any growth. However, the ratio of job applicants to job vacancies may be just as favourable in relation to smaller occupations.
- Graph is an index and does not show skilled vacancy numbers (see *Report overview – Job Trends Brief*).

Interpretation of graph using Metal Fitters and Machinists as example



Source: DEWR

- It should be noted that the Skilled Vacancy Survey (SVS) does not cover all occupations. Furthermore, as a general rule, the job advertisements monitored by the survey for any given occupation, will only be a subset of all vacancies for that occupation.
- Despite the fact that the job advertisements monitored by the SVS fluctuated over time, the above index recorded a significant increase in advertised positions for this occupation in the period shown.
- Over the same timeframe, the SVS recorded a moderate increase for total skilled vacancy activity.

- In this example, advertised vacancies for the metal fitting and machining workforce grew at a much stronger rate over the last few years than for all skilled occupations as a whole. This is generally indicative of strong demand for the occupation.
- The most significant change occurred around mid-2001. Since then, the number of skilled vacancies for the metal fitting and machining workforce has trebled.

Regional Snapshot

Report overview – Regional Snapshot

What is it?

- The *Regional Snapshot* provides a geographical dimension to the selected occupation. The graphs in this report show in what regions most persons employed in the occupation work as well as the regions where the occupation has grown.

Purpose

- The *Regional Snapshot* provides information enabling persons to assess where, geographically speaking, job opportunities are likely to exist for the selected occupation.

Data source(s)

- The *Regional Snapshot* utilises one data source:

Source	Data used in report
ABS Census of Population and Housing	<ul style="list-style-type: none">• Employment shares by region• Change in employment shares by region

Points to note

- The regions are based on ABS Statistical Divisions. There are eleven of these across Queensland. These are:

- Brisbane
- Moreton
- Wide Bay-Burnett
- Darling Downs
- South West
- Fitzroy
- Central West
- Mackay
- Northern
- Far North
- North West

- The only robust regional four-digit occupational data derives from the *Census of Population and Housing*. As the Census is only run every five years, it continues to lose its currency until the next Census is held. However, this loss of currency primarily applies to the raw numbers and less to the proportions. Percentages have been used in the *Regional Snapshot* as these tend to change more slowly and would therefore be broadly indicative of current proportions were these available.
- See *Points to note* pertaining to each data item in this report.

Sample report

The *Regional Snapshot* for Metal Fitters and Machinists follows.

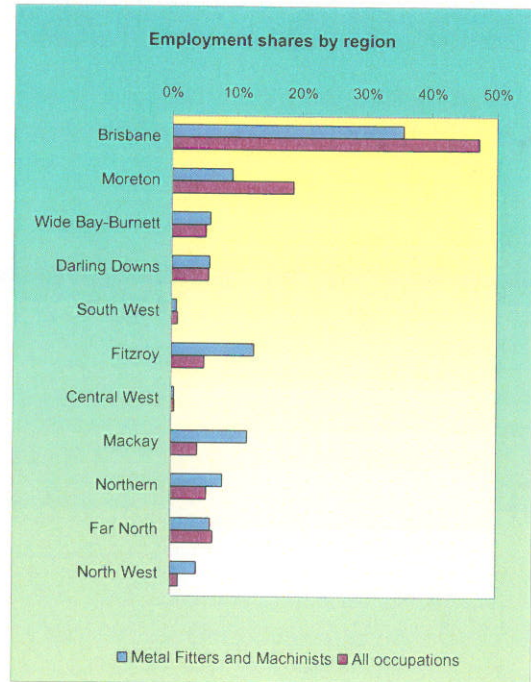
Regional Snapshot

Skilling Solutions Queensland

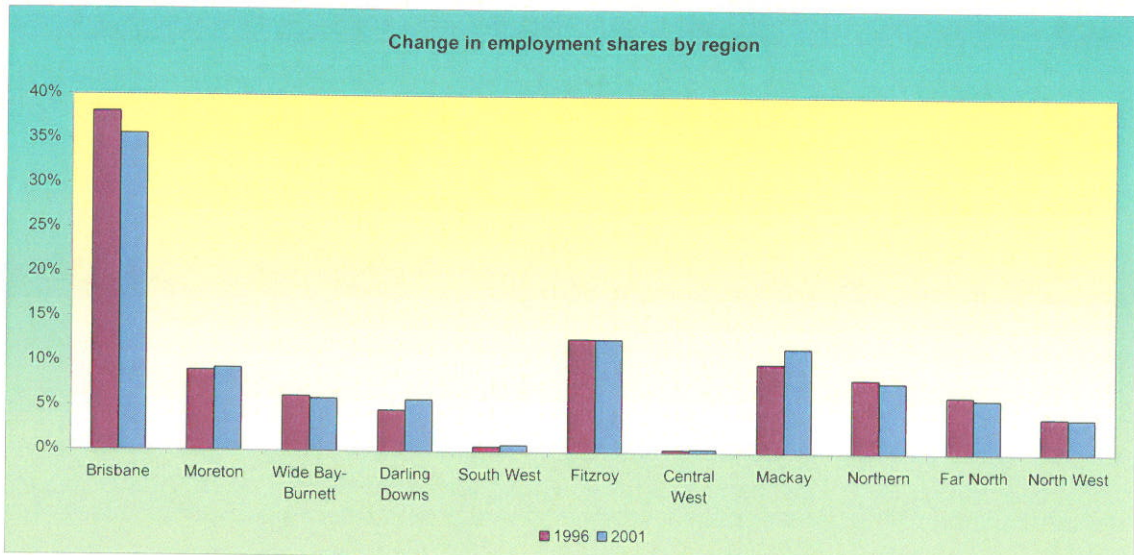
Metal Fitters and Machinists

The regional snapshot for this occupation uses Statistical Divisions to divide Queensland into different regions. These Statistical Divisions have been developed by the Australian Bureau of Statistics (ABS) and are displayed in the below map.

The accompanying graphs are based on data from the ABS Census of Population and Housing. The first of these graphs compares, for this occupation, the employment shares across the regions with the regional employment shares for the total workforce (all occupations). The second graph shows how the regional employment shares for the occupation have changed over the five years to 2001. In each case, the occupational shares add to 100% (the total number of persons employed in the occupation).



Source: ABS Census 2001



Source: ABS Census 1996 and 2001

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Employment shares by region

What is it?

- A graph showing the distribution of the selected occupation across Queensland regions.

Purpose

- In conjunction with the other graph in this report, allows assessment of probable job opportunities for the selected occupation across regions.

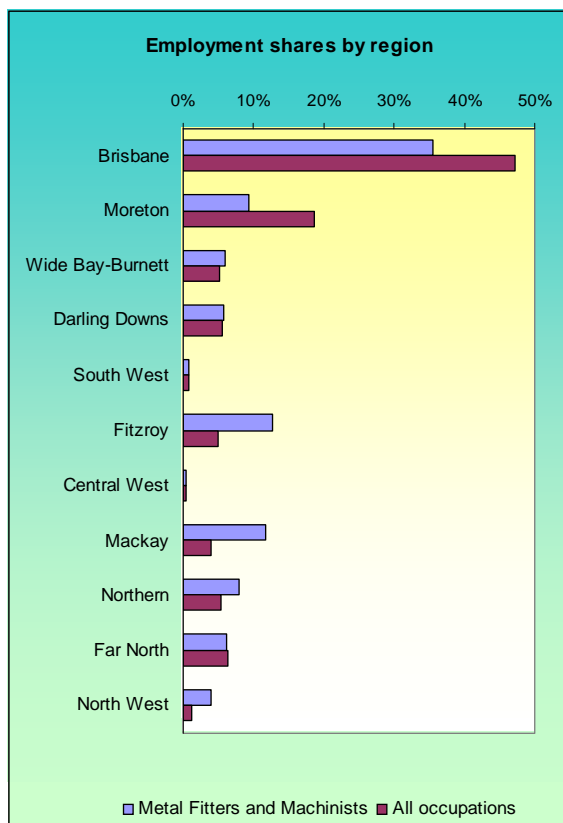
Data source(s)

- ABS *Census of Population and Housing, 2001*

Points to note

- Employment shares across the regions (either for the selected occupation or for all occupations) add to 100%.

Interpretation of graph using Metal Fitters and Machinists as example



- The graph shows that while most metal fitting and machining jobs are in Brisbane, many in this occupation work outside the metropolitan area. In contrast, the Queensland workforce is less regionally dispersed.
- Greater-than-average representation of the metal fitting and machining workforce in regions such as Mackay and Fitzroy stands to reason given that many Metal Fitters and Machinists would be working on large-scale infrastructure projects and in the mines servicing mining and earthmoving equipment.

Queensland region	Metal Fitters and Machinists	All occupations
Brisbane	36%	47%
Moreton	9%	19%
Wide Bay-Burnett	6%	5%
Darling Downs	6%	6%
South West	1%	1%
Fitzroy	13%	5%
Central West	0%	0%
Mackay	12%	4%
Northern	8%	5%
Far North	6%	6%
North West	4%	1%
Total Queensland	100%	100%

Source: ABS Census 2001

Change in employment shares by region

What is it?

- A graph showing change in regional employment shares for the selected occupation over the five years to 2001.

Purpose

- In conjunction with the other graph in this report, allows assessment of probable job opportunities for the selected occupation across regions.

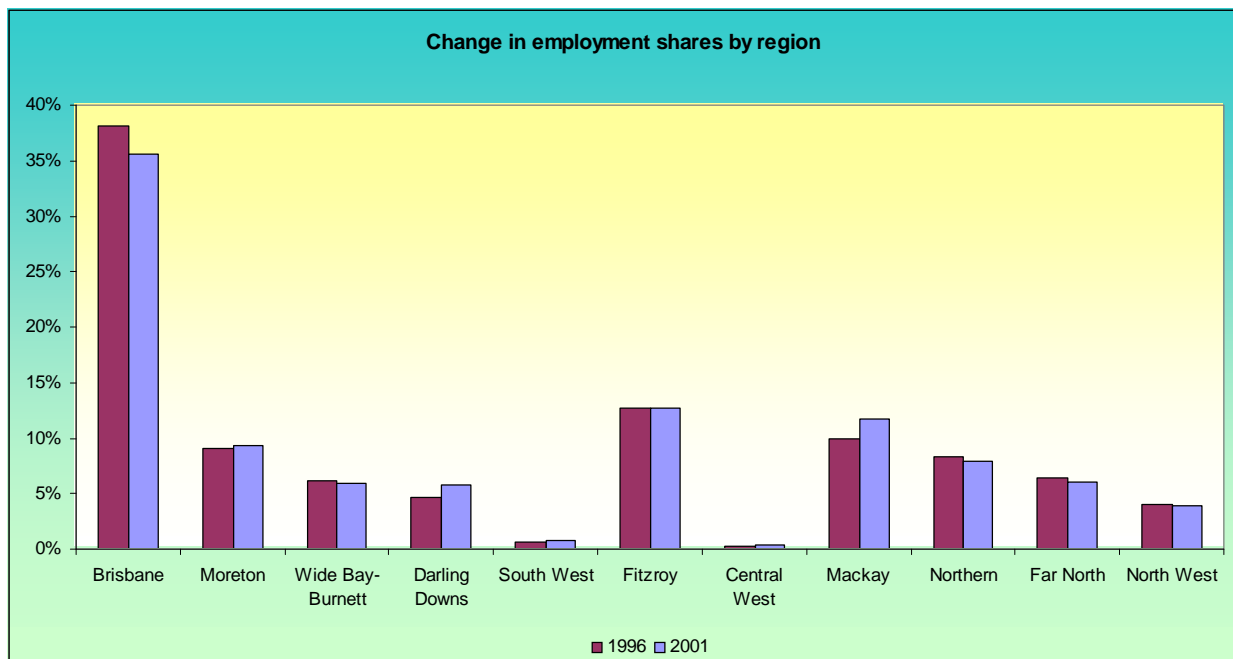
Data source(s)

- ABS Census of Population and Housing, 1996 and 2001

Points to note

- For either year, employment shares across the regions add to 100%.

Interpretation of graph using Metal Fitters and Machinists as example



Source: *Census of Population and Housing, 1996 and 2001*

- The above chart shows the regional dynamics of the metal fitting and machining workforce. Over the five years to 2001 the most significant changes in regional employment shares occurred in Brisbane (where the share of Queensland Metal Fitters and Machinists fell from 38% to 36%) and in the Mackay and Darling Downs regions (where the respective increases were from 10% to 12% and from 5% to 6%). No doubt, these increases reflect local industry developments (see Occupational wrap-up)
- For more information about the graph for Metal Fitters and Machinists, see the following table.

Change in employment shares by region – Metal Fitters and Machinists

<i>Queensland region</i>	<i>1996</i>	<i>2001</i>
Brisbane	38%	36%
Moreton	9%	9%
Wide Bay-Burnett	6%	6%
Darling Downs	5%	6%
South West	1%	1%
Fitzroy	13%	13%
Central West	0%	0%
Mackay	10%	12%
Northern	8%	8%
Far North	6%	6%
North West	4%	4%
Total Queensland	100%	100%

Source: ABS Census 1996 and 2001

Occupational wrap-up

Occupational wrap-up

Summarising the reports for Metal Fitters and Machinists

We've just looked at the three *SmartJOBinfo* reports and discussed the separate data items contained in each in relation to Metal Fitters and Machinists. But what does it all mean?

- Metal Fitters and Machinists are first and foremost manufacturers. They use their hands a lot. They shape and cut metal components using machines (lathes, presses, CNC cutting machines etc.) and then assemble these components to build other machinery. They have to be able to understand drawings and specifications. They apply attention to detail by fabricating to, and checking, fine tolerances using precision measuring instruments.
- To become a qualified Metal Fitter and Machinist a person has to be prepared to study.
- Males seeking full-time work in the manufacturing industry *may* have the best chance of securing a job in this occupation (*but it would be wrong to discourage female clients or those interested in part-time employment from seeking a career in this occupation*).
- There is evidence of demand for this occupation. The Skilled Vacancy Survey shows significant pick-up in demand occurring from mid-2001 to the present and wages growth for Mechanical Engineering Tradespersons (the three-digit ASCO classification covering Metal Fitters and Machinists and related occupations) is significant compared to growth in the average Queensland wage. Furthermore, average weekly full-time hours, while fairly steady over the last four years, have increased for Metal Fitters and Machinists since the end of 2002 relative to the Queensland workforce.
- Employment growth for the occupation has been pretty much line ball with growth in the Queensland workforce. However, the share of the Queensland workforce working as Metal Fitters and Machinists is projected to diminish in the years ahead – if future growth in the occupation is not as strong as the average for all occupations, this share has to diminish. Therefore, job opportunities may in fact be declining over the longer term.
- There are a significant number of job opportunities in Brisbane. However, the share of the occupation working in Brisbane is smaller compared to the share of the Queensland workforce employed in Brisbane. Consequently, the occupation is more regionally dispersed – significant numbers of Metal Fitters and Machinists work in the Fitzroy and Mackay Statistical Divisions. Indeed, there was significant growth in the number of Metal Fitters in the Mackay Statistical Division between 1996 and 2001.

Do the statistics make sense in light of economic and labour market developments?

The short answer is: “Yes”. In recent years, there have been an increasing number of job opportunities for Metal Fitters and Machinists, but the long-term trend has been one of contraction. This contraction in the metal fitting and machining workforce is primarily a result of competition driving manufacturers offshore to set up operations in Asian countries, particularly China, where the cost of labour is considerably cheaper. By comparison, Metal Fitters and Machinists in Western countries get paid a lot more than their Asian counterparts.

Other trends impacting on the Manufacturing workforce include greater use of automated machinery, including industrial robots, in production processes.

This downward employment trend is reflected in the SVS index from 1996 to 2001. Furthermore, the Census of Population and Housing shows a decrease in the number of persons working in the Manufacturing industry when 1996 data is compared to 2001 data.

However, since 2001, the SVS index has recorded a significant increase in vacancies for Metal Fitters and Machinists. This increase coincides with domestic economic developments including the pick-up in the Construction industry that has been fuelled by the residential property market boom and large scale infrastructure developments, particularly in light metals processing, totalling billions of dollars – Comalco Alumina Refinery, Australian Magnesium Corporation project at Stanwell and other projects – that have occurred in recent years. No doubt the additional money that can be made on these projects is attracting qualified Metal Fitters and Machinists to Central Queensland where many of the projects are situated.

These domestic developments have led to an increase in the demand for persons with metal fitting and machining skills. The fact that growth in Metal Fitters and Machinists has roughly kept pace with average employment growth is a good result considering the longer-term downward trend in relation to Manufacturing employment. And any increase in average full-time hours worked may indicate unmet demand – i.e., it is possible that growth in Metal Fitters and Machinists has been slowed by the supply of suitably skilled personnel not keeping pace with industry’s demand for skills.

Occupations covered by SmartJOBInfo reports

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Aboriginal and Torres Strait Islander Education Worker	Education Aides	6311
Aboriginal and Torres Strait Islander Health Worker	Aboriginal And Torres Strait Islander Health	3493
Accountant	Accountants	2211
Accounts Clerk	Accounting Clerks	6141
Actor	Actors, Dancers And Related Professionals	2538
Actors, Dancers and Related Professionals nec	Actors, Dancers And Related Professionals	2538
Actuary	Mathematicians, Statisticians And Actuaries	2293
Acupuncturist	Natural Therapy Professionals	2394
Admissions Clerk	Inquiry And Admissions Clerks	6191
Advertising Specialist	Marketing And Advertising Professionals	2221
Aeronautical Engineer	Other Building And Engineering Professionals	2129
Aged or Disabled Person Carer	Special Care Workers	6313
Agricultural Adviser	Environmental And Agricultural Science Professionals	2114
Agricultural and Horticultural Labourers nec	Other Agricultural And Horticultural Labourers	9929
Agricultural and Horticultural Mobile Plant Operator	Other Mobile Plant Operators	7119
Agricultural Engineer	Other Building And Engineering Professionals	2129
Agricultural Scientist	Environmental And Agricultural Science Professionals	2114
Agricultural Technical Officer	Science Technical Officers	3112
Air Traffic Controller	Air Transport Professionals	2541
Air Transport Professionals nec	Air Transport Professionals	2541
Aircraft Maintenance Engineer (Avionics)	Aircraft Maintenance Engineers	4114
Aircraft Maintenance Engineer (Mechanical)	Aircraft Maintenance Engineers	4114
Aircraft Maintenance Engineer (Structures)	Aircraft Maintenance Engineers	4114
Aircraft Pilot	Air Transport Professionals	2541
Aircraft Safety Equipment Worker	Other Miscellaneous Tradespersons And Related Workers	4999
Ambulance Officer	Ambulance Officers And Paramedics	3491
Amusement Centre Manager	Sport And Recreation Managers	3391
Anaesthetist	Specialist Medical Practitioners	2312
Anatomist or Physiologist	Life Scientists	2113
Animal Attendant	Other Intermediate Service Workers	6399
Animal Trainers nec	Animal Trainers	4614
Apiarist	Livestock Farmers	1312
Apparel Cutter	Clothing Tradespersons	4941
Applications and Analyst Programmer	Computing Professionals	2231
Apprentice Aircraft Maintenance Engineer (Avionics)	Aircraft Maintenance Engineers	4114
Apprentice Aircraft Maintenance Engineer (Mechanical)	Aircraft Maintenance Engineers	4114
Apprentice Aircraft Maintenance Engineer (Structures)	Aircraft Maintenance Engineers	4114

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Apprentice Automotive Electrician	Automotive Electricians	4212
Apprentice Baker	Bakers And Pastrycooks	4512
Apprentice Binder and Finisher	Binders And Finishers	4913
Apprentice Blacksmith	Forging Tradespersons	4123
Apprentice Boat Builder and Repairer	Marine Construction Tradespersons	4981
Apprentice Bricklayer	Bricklayers	4414
Apprentice Business Machine Mechanic	Electronic And Office Equipment Tradespersons	4315
Apprentice Butcher	Meat Tradespersons	4511
Apprentice Buttermaker or Cheesemaker	Other Food Tradespersons	4519
Apprentice Cabinetmaker	Cabinetmakers	4922
Apprentice Cable Jointer	Electrical Distribution Tradespersons	4313
Apprentice Carpenter	Carpentry And Joinery Tradespersons	4411
Apprentice Carpenter and Joiner	Carpentry And Joinery Tradespersons	4411
Apprentice Clothing Tradesperson	Clothing Tradespersons	4941
Apprentice Communications Linesperson	Communications Tradespersons	4316
Apprentice Confectioner	Other Food Tradespersons	4519
Apprentice Cook or Chef	Cooks	4513
Apprentice Drainer	Plumbers	4431
Apprentice Electrical Powerline Tradesperson	Electrical Distribution Tradespersons	4313
Apprentice Electrician	Electricians	4311
Apprentice Electronic Equipment Tradesperson	Electronic And Office Equipment Tradespersons	4315
Apprentice Electronic Instrument Tradesperson	Electronic Instrument Tradespersons	4314
Apprentice Electroplater	Metal Finishing Tradespersons	4126
Apprentice Farrier	Forging Tradespersons	4123
Apprentice Fibrous Plasterer	Fibrous Plasterers	4412
Apprentice Fitter	Metal Fitters And Machinists	4112
Apprentice Flat Glass Tradesperson	Glass Tradespersons	4982
Apprentice Floor Finisher	Floor Finishers	4423
Apprentice Furniture Finisher	Other Wood Tradespersons	4929
Apprentice Gasfitter	Plumbers	4431
Apprentice Gem Cutter and Polisher	Jewellers And Related Tradespersons	4983
Apprentice General Communications Tradesperson	Communications Tradespersons	4316
Apprentice General Fabrication Engineering Tradesperson	General Fabrication Engineering Tradespersons	4121
Apprentice General Gardener	Gardeners	4623
Apprentice General Mechanical Engineering Tradesperson	General Mechanical Engineering Tradespersons	4111
Apprentice General Plumber	Plumbers	4431
Apprentice Glass Blower	Glass Tradespersons	4982
Apprentice Graphic Pre-Press Tradesperson	Graphic Pre-Press Tradespersons	4911
Apprentice Greenkeeper	Greenkeepers	4622
Apprentice Hairdresser	Hairdressers	4931
Apprentice Jeweller	Jewellers And Related Tradespersons	4983

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Apprentice Joiner	Carpentry And Joinery Tradespersons	4411
Apprentice Landscape Gardener	Gardeners	4623
Apprentice Leather Goods, Canvas Goods or Sail Maker	Leather Goods, Canvas Goods And Sail Makers	4944
Apprentice Lift Mechanic	Electricians	4311
Apprentice Mechanical Services and Airconditioning Plumber	Plumbers	4431
Apprentice Metal Casting Tradesperson	Metal Casting Tradespersons	4125
Apprentice Metal Fabricator	Structural Steel And Welding Tradespersons	4122
Apprentice Metal Machinist	Metal Fitters And Machinists	4112
Apprentice Metal Polisher	Metal Finishing Tradespersons	4126
Apprentice Miller	Other Food Tradespersons	4519
Apprentice Motor Mechanic	Motor Mechanics	4211
Apprentice Nurseryperson	Nurserypersons	4621
Apprentice Painter and Decorator	Painters And Decorators	4421
Apprentice Panel Beater	Panel Beaters	4213
Apprentice Pastrycook	Bakers And Pastrycooks	4512
Apprentice Picture Framer	Other Wood Tradespersons	4929
Apprentice Precision Metal Tradesperson	Precision Metal Tradespersons	4115
Apprentice Printing Machinist	Printing Machinists And Small Offset Printers	4912
Apprentice Refrigeration and Airconditioning Mechanic	Refrigeration And Airconditioning Mechanics	4312
Apprentice Roof Plumber	Plumbers	4431
Apprentice Roof Slater and Tiler	Roof Slaters And Tilers	4413
Apprentice Screen Printer	Screen Printers	4914
Apprentice Sheetmetal Worker	Sheetmetal Tradespersons	4124
Apprentice Shipwright	Marine Construction Tradespersons	4981
Apprentice Shoemaker	Footwear Tradespersons	4943
Apprentice Signwriter	Signwriters	4422
Apprentice Slaughterpersion	Meat Tradespersons	4511
Apprentice Small Offset Printer	Printing Machinists And Small Offset Printers	4912
Apprentice Smallgoods Maker	Meat Tradespersons	4511
Apprentice Solid Plasterer	Solid Plasterers	4415
Apprentice Stonemason	Wall And Floor Tilers And Stonemasons	4416
Apprentice Textile, Clothing or Footwear Mechanic	Metal Fitters And Machinists	4112
Apprentice Toolmaker	Toolmakers	4113
Apprentice Tree Surgeon	Gardeners	4623
Apprentice Upholsterer or Bedding Tradespersons	Upholsterers And Bedding Tradespersons	4942
Apprentice Vehicle Body Maker	Vehicle Body Makers	4215
Apprentice Vehicle Painter	Vehicle Painters	4214
Apprentice Vehicle Trimmer	Vehicle Trimmers	4216
Apprentice Wall and Floor Tiler	Wall And Floor Tilers And Stonemasons	4416
Apprentice Welder	Structural Steel And Welding Tradespersons	4122
Apprentice Wood Machinist	Wood Machinists And Turners	4921

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Apprentice Wood Tradespersons nec	Other Wood Tradespersons	4929
Apprentice Wood Turner	Wood Machinists And Turners	4921
Aquaculture Farmer	Aquaculture Farmers	1314
Architect	Architects And Landscape Architects	2121
Architectural Associate	Building, Architectural And Surveying Associate Professionals	3121
Archivist	Other Business And Information Professionals	2299
Armoured Car Escort	Guards And Security Officers	8311
Art Director (Film, Television or Stage)	Film, Television, Radio And Stage Directors	2536
Art Teacher (Private)	Extra-Systemic Teachers	2491
Artistic Director	Media Producers And Artistic Directors	1296
Associate Professionals nec	Other Miscellaneous Associate Professionals	3999
Auctioneer	Other Miscellaneous Advanced Clerical And Service Workers	5999
Audiologist	Other Health Professionals	2399
Author	Authors And Related Professionals	2535
Automobile Driver	Automobile Drivers	7313
Automotive Electrician	Automotive Electricians	4212
Backhoe Operator	Mobile Construction Plant Operators	7111
Bailiff or Sheriff	Other Intermediate Clerical Workers	6199
Baker	Bakers And Pastrycooks	4512
Baking Factory Hand	Other Food Factory Hands	9214
Bank Worker	Bank Workers	6143
Bar Attendant	Bar Attendants	6322
Barrister	Legal Professionals	2521
Beauty Therapist	Personal Care Consultants	6395
Beef Cattle Farmer	Livestock Farmers	1312
Betting Agency Branch Manager	Other Managing Supervisors (Sales And Service)	3399
Betting Agency Counter Clerk	Betting Clerks	8115
Betting Clerks nec	Betting Clerks	8115
Binder and Finisher	Binders And Finishers	4913
Biochemist	Life Scientists	2113
Biomedical Engineer	Other Building And Engineering Professionals	2129
Biomedical Engineering Associate	Other Building And Engineering Associate Professionals	3129
Blacksmith	Forging Tradespersons	4123
Blasting Worker	Blasting Workers	7912
Boat Builder and Repairer	Marine Construction Tradespersons	4981
Book Editor	Authors And Related Professionals	2535
Bookkeeper	Bookkeepers	5911
Bookmaker	Financial Dealers And Brokers	3212
Bookmaker's Clerk	Betting Clerks	8115
Botanist	Life Scientists	2113

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Branch Accountant (Financial Institution)	Branch Accountants And Managers (Financial Institution)	3211
Bricklayer	Bricklayers	4414
Broadcast Transmitter Operator	Performing Arts Support Workers	4992
Building and Engineering Associate Professionals nec	Other Building And Engineering Associate Professionals	3129
Building and Engineering Professionals nec	Other Building And Engineering Professionals	2129
Building Associate	Building, Architectural And Surveying Associate Professionals	3121
Building Inspector	Building, Architectural And Surveying Associate Professionals	3121
Building Insulation Installer	Insulation And Home Improvements Installers	7914
Bulk Materials Handling Plant Operator	Other Intermediate Stationary Plant Operators	7129
Bulldozer Operator	Mobile Construction Plant Operators	7111
Bus Driver	Bus And Tram Drivers	7312
Business and Information Professionals nec	Other Business And Information Professionals	2299
Business Machine Mechanic	Electronic And Office Equipment Tradespersons	4315
Butcher	Meat Tradespersons	4511
Buttermaker or Cheesemaker	Other Food Tradespersons	4519
Cabinetmaker	Cabinetmakers	4922
Cable Joints	Electrical Distribution Tradespersons	4313
Camera Operator (Film, Television or Video)	Performing Arts Support Workers	4992
Canvas Goods Maker	Leather Goods, Canvas Goods And Sail Makers	4944
Car Park Attendant	Other Elementary Service Workers	8319
Car Rental Agency Manager	Other Managing Supervisors (Sales And Service)	3399
Caravan Park and Camping Ground Manager	Caravan Park And Camping Ground Managers	3325
Careers Counsellor	Counsellors	2513
Caretaker	Caretakers	8314
Carpenter	Carpentry And Joinery Tradespersons	4411
Carpenter and Joiner	Carpentry And Joinery Tradespersons	4411
Carpet Cleaner	Cleaners	9111
Cartographer	Cartographers And Surveyors	2123
Cash Van Salesperson	Street Vendors And Related Workers	8293
Cement and Concrete Plant Labourer	Other Process Workers	9219
Cement Production Plant Operator	Other Intermediate Stationary Plant Operators	7129
Checkout Operator	Checkout Operators And Cashiers	8291
Checkout Supervisor	Retail And Checkout Supervisors	6213
Chef	Chefs	3322
Chemical Engineer	Other Building And Engineering Professionals	2129
Chemical Plant Labourer	Other Process Workers	9219
Chemical Plant Operator	Chemical, Petroleum And Gas Plant Operators	4987
Chemical Production Machine Operator	Chemical Production Machine Operators	7293
Chemist	Chemists	2111
Chemistry Technical Officer	Science Technical Officers	3112

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Child Care Co-ordinator	Child Care Co-ordinators	1295
Child Care Worker	Children's Care Workers	6312
Child or Youth Residential Care Assistant	Special Care Workers	6313
Chiropractor	Chiropractors And Osteopaths	2387
Civil Engineer	Civil Engineers	2124
Civil Engineering Associate	Civil Engineering Associate Professionals	3122
Civil Engineering Technician	Civil Engineering Associate Professionals	3122
Civil Engineering Technologist	Engineering Technologists	2128
Classified Advertising Clerk	Other Elementary Clerks	8119
Clay Processing Factory Hand	Other Process Workers	9219
Clay Products Machine Operator	Clay, Stone And Concrete Processing Machine Operators	7297
Clay, Stone and Concrete Processing Machine Operators nec	Clay, Stone And Concrete Processing Machine Operators	7297
Cleaners nec	Cleaners	9111
Clerk of Court	Advanced Legal And Related Clerks	5991
Clinical Psychologist	Psychologists	2514
Clothing Tradespersons nec	Clothing Tradespersons	4941
Club Manager (Licensed Premises)	Club Managers (Licensed Premises)	3324
Coding Clerk	Other Intermediate Clerical Workers	6199
Commercial Cleaner	Cleaners	9111
Commissioned Defence Force Officer	Commissioned Officers (Management)	1294
Commissioned Fire Officer	Commissioned Officers (Management)	1294
Commissioned Police Officer	Commissioned Officers (Management)	1294
Commodities Trader	Financial Dealers And Brokers	3212
Communications Linesperson	Communications Tradespersons	4316
Community Worker	Welfare And Community Workers	2512
Company Secretary	Company Secretaries	1212
Composer	Musicians And Related Professionals	2537
Computer Systems Auditor	Computing Professionals	2231
Computing Professionals nec	Computing Professionals	2231
Computing Support Technician	Computing Support Technicians	3294
Concrete Batching Plant Operator	Other Intermediate Stationary Plant Operators	7129
Concrete Products Machine Operator	Clay, Stone And Concrete Processing Machine Operators	7297
Concrete Pump Operator	Other Intermediate Stationary Plant Operators	7129
Concreter	Concreters	9917
Confectioner	Other Food Tradespersons	4519
Conservator	Other Professionals	2549
Construction Assistant	Construction And Plumber's Assistants	9916
Construction Project Manager	Building And Construction Managers	1191
Construction Rigger	Structural Steel Construction Workers	7913
Cook	Cooks	4513

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Copywriter	Journalists And Related Professionals	2534
Corporate Treasurer	Corporate Treasurers	2213
Cost Clerk	Accounting Clerks	6141
Counsellors nec	Counsellors	2513
Courier	Messengers	8114
Court or Hansard Reporter	Court And Hansard Reporters	5992
Court Orderly	Other Intermediate Clerical Workers	6199
Crane Chaser	Other Mining, Construction And Related Labourers	9919
Crane, Hoist or Lift Operator	Crane, Hoist And Lift Operators	7122
Credit and Loans Officer	Credit And Loans Officers	5912
Credit Clerk	Accounting Clerks	6141
Crop Farmers nec	Crop Farmers	1313
Crossing Supervisor	Other Elementary Service Workers	8319
Customer Service Manager	Customer Service Managers	3392
Customs Inspector	Intermediate Inspectors And Examiners	6194
Dairy Factory Hand	Other Food Factory Hands	9214
Dairy Farmer	Livestock Farmers	1312
Dance Teacher (Private)	Extra-Systemic Teachers	2491
Dancer or Choreographer	Actors, Dancers And Related Professionals	2538
Data Entry Operator	Keyboard Operators	6121
Debt Collector	Other Intermediate Clerical Workers	6199
Defence Force Member Not Elsewhere Included	No job reports available for this occupation	4991
Delivery Driver	Delivery Drivers	7314
Dental Assistant	Dental Assistants	6391
Dental Hygienist	Dental Associate Professionals	3492
Dental Specialist	Dental Practitioners	2381
Dental Technician	Dental Associate Professionals	3492
Dental Therapist	Dental Associate Professionals	3492
Dentist	Dental Practitioners	2381
Dermatologist	Specialist Medical Practitioners	2312
Desktop Publishing Operator	Desktop Publishing Operators	5995
Dietitian	Dietitians	2393
Director (Film, Television, Radio or Stage)	Film, Television, Radio And Stage Directors	2536
Director of Nursing	Health Services Managers	1292
Director of Photography	Film, Television, Radio And Stage Directors	2536
Disabilities Services Officer	Welfare Associate Professionals	3421
Diver	Other Miscellaneous Tradespersons And Related Workers	4999
Domestic Cleaner	Cleaners	9111
Domestic Housekeeper	Domestic Housekeepers	8313
Door-to-Door Salesperson	Street Vendors And Related Workers	8293
Drainer	Plumbers	4431

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Drama Teacher (Private)	Extra-Systemic Teachers	2491
Dressmaker	Clothing Tradespersons	4941
Driller	Drillers	4986
Driller's Assistant	Mining Support Workers And Driller's Assistants	9911
Drink Waiter	Waiters	6323
Driving Instructor	Other Intermediate Service Workers	6399
Drug and Alcohol Counsellor	Counsellors	2513
Earth Science Technical Officer	Science Technical Officers	3112
Earthmoving Labourer	Earthmoving Labourers	9912
Economist	Economists	2522
Editor	Journalists And Related Professionals	2534
Education Managers nec	Education Managers	1293
Education Officer	Education Officers	2493
Educational Psychologist	Psychologists	2514
Electorate Officer	Other Professionals	2549
Electrical Engineer	Electrical And Electronics Engineers	2125
Electrical Engineering Associate	Electrical Engineering Associate Professionals	3123
Electrical Engineering Technician	Electrical Engineering Associate Professionals	3123
Electrical or Electronics Engineering Technologist	Engineering Technologists	2128
Electrical or Telecommunications Trades Assistant	Electrical And Telecommunications Trades Assistants	9918
Electrical Powerline Tradesperson	Electrical Distribution Tradespersons	4313
Electrician (Special Class)	Electricians	4311
Electronic Engineering Associate	Electronic Engineering Associate Professionals	3124
Electronic Engineering Technician	Electronic Engineering Associate Professionals	3124
Electronic Equipment Tradesperson	Electronic And Office Equipment Tradespersons	4315
Electronic Instrument Tradesperson (Special Class)	Electronic Instrument Tradespersons	4314
Electronics Engineer	Electrical And Electronics Engineers	2125
Electroplater (First Class)	Metal Finishing Tradespersons	4126
Elementary Clerks nec	Other Elementary Clerks	8119
Elementary Sales Workers nec	Other Elementary Sales Workers	8299
Elementary Service Workers nec	Other Elementary Service Workers	8319
Emergency Medicine Specialist	Specialist Medical Practitioners	2312
Employment Office Clerk	Personnel Clerks	6193
Engine or Boiler Operator	Engine And Boiler Operators	7121
Engineering Manager	Engineering Managers	1221
Engineering Production Process Worker	Engineering Production Process Workers	9211
Engineering Production Systems Worker	Engineering Production Systems Workers	7123
Engineering Technologists nec	Engineering Technologists	2128
English as a Second Language Teacher	English As A Second Language Teachers	2492
Engraver	Precision Metal Tradespersons	4115
Enrolled Nurse	Enrolled Nurses	3411

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Environment, Parks and Land Care Manager	Other Specialist Managers	1299
Environmental and Agricultural Science Professionals nec	Environmental And Agricultural Science Professionals	2114
Environmental Health Officer	Occupational And Environmental Health Professionals	2543
Environmental Research Scientist	Environmental And Agricultural Science Professionals	2114
Examination Supervisor	Other Elementary Service Workers	8319
Excavator Operator	Mobile Construction Plant Operators	7111
External Auditor	Auditors	2212
Extractive Metallurgist	Other Natural And Physical Science Professionals	2119
Extra-Systemic Teachers nec	Extra-Systemic Teachers	2491
Fabric and Textile Factory Hand	Other Process Workers	9219
Faculty Head	Education Managers	1293
Family Counsellor	Counsellors	2513
Family Day Care Worker	Children's Care Workers	6312
Family Support Worker	Welfare Associate Professionals	3421
Farm Hands nec	Farm Hands	9921
Farm Overseer	Farm Overseers	4611
Farrier	Forging Tradespersons	4123
Fashion Designer	Designers And Illustrators	2533
Fast Food Cook	Fast Food Cooks	9932
Fence Erector	Other Mining, Construction And Related Labourers	9919
Fibrous Plasterer	Fibrous Plasterers	4412
Film and Video Editor	Film, Television, Radio And Stage Directors	2536
Film, Television, Radio and Stage Directors nec	Film, Television, Radio And Stage Directors	2536
Finance Manager	Finance Managers	1211
Financial Dealers and Brokers nec	Financial Dealers And Brokers	3212
Financial Institution Branch Manager	Branch Accountants And Managers (Financial Institution)	3211
Financial Investment Adviser	Financial Investment Advisers	3213
Financial Market Dealer	Financial Dealers And Brokers	3212
Fire Fighter	Fire Fighters	4985
Fish Process Worker	Meat And Fish Process Workers	9213
Fishing Hand	Seafarers And Fishing Hands	7994
Fitness Centre Manager	Sport And Recreation Managers	3391
Fitness Instructor	Fitness Instructors And Related Workers	6396
Fitter	Metal Fitters And Machinists	4112
Flat Glass Tradesperson	Glass Tradespersons	4982
Fleet Manager	Other Managing Supervisors (Sales And Service)	3399
Flight Attendant	Travel Attendants	5996
Flight Engineer	Air Transport Professionals	2541
Flight Service Director	Travel Attendants	5996
Flight Service Officer	Air Transport Professionals	2541
Floor Finisher	Floor Finishers	4423

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Florist	Florists	4984
Flower Grower	Crop Farmers	1313
Flying Instructor	Air Transport Professionals	2541
Food and Drink Processing Machine Attendant	Other Food Factory Hands	9214
Food Factory Hands nec	Other Food Factory Hands	9214
Food Products Millhand	Other Food Factory Hands	9214
Food Trades Assistants nec	Food Trades Assistants	9933
Footballer	Sportspersons, Coaches And Related Support Workers	3993
Footwear Factory Hand	Other Process Workers	9219
Footwear Production Machine Operator	Textile And Footwear Production Machine Operators	7212
Forester	Environmental And Agricultural Science Professionals	2114
Forestry Worker	Forestry And Logging Workers	7995
Forklift Driver	Forklift Drivers	7112
Freight Handler (Road and Rail)	Freight And Furniture Handlers	9992
Fruit and Nut Grower	Crop Farmers	1313
Fruit and Vegetable Factory Hand	Other Food Factory Hands	9214
Fruit, Vegetable or Nut Farm Hand	Farm Hands	9921
Funeral Director	Other Managing Supervisors (Sales And Service)	3399
Furniture Finisher	Other Wood Tradespersons	4929
Furniture Removalist	Truck Drivers	7311
Furniture Upholsterer	Upholsterers And Bedding Tradespersons	4942
Futures Trader	Financial Dealers And Brokers	3212
Gaming Dealer	Gaming Workers	6394
Gaming Pit Boss	Gaming Workers	6394
Gaming Table Supervisor	Gaming Workers	6394
Garbage Collector	Garbage Collectors	9991
Garden Labourer	Nursery And Garden Labourers	9922
Gasfitter	Plumbers	4431
Gem Cutter and Polisher	Jewellers And Related Tradespersons	4983
General Clerk	General Clerks	6111
General Clothing Tradesperson	Clothing Tradespersons	4941
General Communications Tradesperson	Communications Tradespersons	4316
General Construction Plant Operator	Mobile Construction Plant Operators	7111
General Electrician	Electricians	4311
General Electronic Instrument Tradesperson	Electronic Instrument Tradespersons	4314
General Fabrication Engineering Tradesperson	General Fabrication Engineering Tradespersons	4121
General Farm Hand	Farm Hands	9921
General Gardener	Gardeners	4623
General Manager	General Managers	1112
General Mechanical Engineering Tradesperson	General Mechanical Engineering Tradespersons	4111
General Medical Practitioner	Generalist Medical Practitioners	2311

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
General Plastics Production Machine Operator	Plastics Production Machine Operators	7291
General Plumber	Plumbers	4431
General Waiter	Waiters	6323
Geologist	Geologists And Geophysicists	2112
Geophysicist	Geologists And Geophysicists	2112
Glass Blower	Glass Tradespersons	4982
Glass Processing Labourer	Other Process Workers	9219
Glass Production Machine Operator	Glass Production Machine Operators	7296
Golfer	Sportspersons, Coaches And Related Support Workers	3993
Grader Operator	Mobile Construction Plant Operators	7111
Grain, Oilseed and Pasture Grower	Crop Farmers	1313
Graphic Designer	Designers And Illustrators	2533
Graphic Pre-Press Tradesperson	Graphic Pre-Press Tradespersons	4911
Greenkeeper	Greenkeepers	4622
Guards and Security Officers nec	Guards And Security Officers	8311
Gunsmith	Precision Metal Tradespersons	4115
Gymnastics Coach	Sportspersons, Coaches And Related Support Workers	3993
Hair and Beauty Salon Assistant	Other Elementary Service Workers	8319
Hair and Beauty Salon Manager	Other Managing Supervisors (Sales And Service)	3399
Hairdresser	Hairdressers	4931
Hand Packer	Hand Packers	9221
Handyperson	Handypersons	9993
Head Chef	Chefs	3322
Head Gardener	Gardeners	4623
Health Information Manager	Other Business And Information Professionals	2299
Health Professionals nec	Other Health Professionals	2399
Heavy Truck Driver	Truck Drivers	7311
Hide and Skin Classer	Wool, Hide And Skin Classers	4613
Hide and Skin Processing Labourer	Other Process Workers	9219
Hide and Skin Processing Machine Operator	Textile And Footwear Production Machine Operators	7212
Historian	Other Social Professionals	2529
Home Improvements Installer	Insulation And Home Improvements Installers	7914
Horse Breeder	Livestock Farmers	1312
Horse or Dog Racing Official	Sportspersons, Coaches And Related Support Workers	3993
Horse Trainer	Animal Trainers	4614
Horseriding Coach	Sportspersons, Coaches And Related Support Workers	3993
Horticultural Nursery Assistant	Nursery And Garden Labourers	9922
Hospital Pharmacist	Pharmacists	2382
Hospitality Trainee	Hospitality Trainees	6324
Hostel Parent	Special Care Workers	6313
Hotel or Motel Manager	Hotel And Motel Managers	3323

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Hotel Service Supervisor	Hotel Service Supervisors	6321
Human Resource Manager	Human Resource Managers	1213
Illustrator	Designers And Illustrators	2533
Importer or Exporter	Importers, Exporters And Wholesalers	1192
Import-Export Clerk	Transport And Despatching Clerks	6152
Industrial Designer	Designers And Illustrators	2533
Industrial Engineer	Other Building And Engineering Professionals	2129
Industrial Pharmacist	Pharmacists	2382
Industrial Relations Officer	Human Resource Professionals	2291
Industrial Spray Painter	Other Intermediate Machine Operators	7299
Information Technology Manager	Information Technology Managers	1224
Inquiry Clerk	Inquiry And Admissions Clerks	6191
Instrumental Musician	Musicians And Related Professionals	2537
Insurance Agent	Insurance Agents	5993
Insurance Broker	Financial Dealers And Brokers	3212
Insurance Clerk	Insurance Clerks	6144
Insurance Investigator	Insurance Risk Surveyors, Investigators And Loss Adjusters	5994
Insurance Loss Adjuster	Insurance Risk Surveyors, Investigators And Loss Adjusters	5994
Insurance Risk Surveyor	Insurance Risk Surveyors, Investigators And Loss Adjusters	5994
Integration Aide	Education Aides	6311
Intelligence Officer	Other Business And Information Professionals	2299
Intensive Care Ambulance Paramedic	Ambulance Officers And Paramedics	3491
Interior Decorator	Other Miscellaneous Associate Professionals	3999
Interior Designer	Designers And Illustrators	2533
Intermediate Clerical Workers nec	Other Intermediate Clerical Workers	6199
Intermediate Inspectors and Examiners nec	Intermediate Inspectors And Examiners	6194
Intermediate Machine Operators nec	Other Intermediate Machine Operators	7299
Intermediate Service Workers nec	Other Intermediate Service Workers	6399
Intermediate Stationary Plant Operators nec	Other Intermediate Stationary Plant Operators	7129
Internal Auditor	Auditors	2212
Interpreter	Other Social Professionals	2529
Interviewer	Other Elementary Clerks	8119
Jeweller	Jewellers And Related Tradespersons	4983
Jockey	Sportspersons, Coaches And Related Support Workers	3993
Joiner	Carpentry And Joinery Tradespersons	4411
Journalists and Related Professionals nec	Journalists And Related Professionals	2534
Judge	Legislators And Government Appointed Officials	1111
Kitchenhand	Kitchenhands	9931
Knitting Machine Operator	Textile And Footwear Production Machine Operators	7212
Laboratory Manager	Other Specialist Managers	1299
Labourers and Related Workers nec	Other Miscellaneous Labourers And Related Workers	9999

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Lagger	Other Mining, Construction And Related Labourers	9919
Land Economist	Property Professionals	2295
Landscape Architect	Architects And Landscape Architects	2121
Landscape Gardener	Gardeners	4623
Laundry Worker	Laundry Workers	8315
Law Clerk	Advanced Legal And Related Clerks	5991
Leaflet and Newspaper Deliverer	Other Elementary Service Workers	8319
Leather Goods Maker	Leather Goods, Canvas Goods And Sail Makers	4944
Legal Professionals nec	Legal Professionals	2521
Legislators and Government Appointed Officials nec	Legislators And Government Appointed Officials	1111
Librarian	Librarians	2292
Library Assistant	Library Assistants	6192
Library Technician	Library Technicians	3997
Life Science Technical Officer	Science Technical Officers	3112
Life Scientists nec	Life Scientists	2113
Lift Mechanic	Electricians	4311
Light Technician	Performing Arts Support Workers	4992
Livestock Farmers nec	Livestock Farmers	1312
Loader Operator	Mobile Construction Plant Operators	7111
Locksmith	Precision Metal Tradespersons	4115
Logging Assistant	Forestry And Logging Workers	7995
Logging Plant Operator	Other Mobile Plant Operators	7119
Luggage Porter or Doorperson	Ushers, Porters And Related Workers	8312
Magistrate	Legislators And Government Appointed Officials	1111
Mail Clerk	Mail Sorting Clerks	8112
Mail Supervisor	Other Intermediate Clerical Workers	6199
Make Up Artist	Performing Arts Support Workers	4992
Management Consultant	Business And Organisation Analysts	2294
Managing Supervisors (Sales and Service) nec	Other Managing Supervisors (Sales And Service)	3399
Manufacturer	Manufacturers	1193
Marine Biologist	Life Scientists	2113
Market Research Analyst	Marketing And Advertising Professionals	2221
Marketing Specialist	Marketing And Advertising Professionals	2221
Massage Therapist	Massage Therapists	3494
Master Fisher	Sea Transport Professionals	2542
Materials Engineer	Mining And Materials Engineers	2127
Materials Recycler	Other Elementary Sales Workers	8299
Materials Scientist	Other Natural And Physical Science Professionals	2119
Mathematician	Mathematicians, Statisticians And Actuaries	2293
Meat Boner and Slicer	Meat And Fish Process Workers	9213
Meatworks Labourer	Meat And Fish Process Workers	9213

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Mechanical Engineer	Mechanical, Production And Plant Engineers	2126
Mechanical Engineering Associate	Mechanical Engineering Associate Professionals	3125
Mechanical Engineering Technician	Mechanical Engineering Associate Professionals	3125
Mechanical Engineering Technologist	Engineering Technologists	2128
Mechanical Services and Airconditioning Plumber	Plumbers	4431
Mechanic's Assistant	Other Miscellaneous Labourers And Related Workers	9999
Media Producer	Media Producers And Artistic Directors	1296
Medical Administrator	Health Services Managers	1292
Medical Diagnostic Radiographer	Medical Imaging Professionals	2391
Medical Grade Shoemaker	Footwear Tradespersons	4943
Medical Laboratory Technical Officer	Medical Technical Officers	3111
Medical Practitioner in Training	Generalist Medical Practitioners	2311
Medical Scientist	Medical Scientists	2115
Medical Technical Officers nec	Medical Technical Officers	3111
Metal Casting Tradesperson	Metal Casting Tradespersons	4125
Metal Fabricator	Structural Steel And Welding Tradespersons	4122
Metal Machinist (First Class)	Metal Fitters And Machinists	4112
Metal Polisher	Metal Finishing Tradespersons	4126
Metallurgical and Materials Technician	Other Building And Engineering Associate Professionals	3129
Meteorologist	Other Natural And Physical Science Professionals	2119
Meter Reader	Other Elementary Clerks	8119
Miller	Other Food Tradespersons	4519
Mine Deputy	Other Building And Engineering Associate Professionals	3129
Miner	Miners	7911
Mining Engineer (excluding Petroleum)	Mining And Materials Engineers	2127
Mining Support Worker	Mining Support Workers And Driller's Assistants	9911
Minister of Religion	Ministers Of Religion	2515
Mixed Crop and Livestock Farmer	Mixed Crop And Livestock Farmers	1311
Mixed Livestock Farmer	Livestock Farmers	1312
Mobile Plant Operators nec	Other Mobile Plant Operators	7119
Model	Sales Demonstrators And Models	8295
Money Market Clerk	Money Market And Statistical Clerks	6145
Motion Picture Projectionist	Performing Arts Support Workers	4992
Motor Mechanic	Motor Mechanics	4211
Motor Vehicle and Caravan Salesperson	Motor Vehicle And Related Products Salespersons	6212
Motor Vehicle Licence Examiner	Intermediate Inspectors And Examiners	6194
Motor Vehicle Parts and Accessories Fitter	Motor Vehicle Parts And Accessories Fitters	7991
Motor Vehicle Parts Interpreter	Motor Vehicle And Related Products Salespersons	6212
Museum or Art Gallery Technician	Other Miscellaneous Associate Professionals	3999
Museum or Gallery Attendant	Other Intermediate Service Workers	6399
Museum or Gallery Curator	Other Professionals	2549

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Music Director	Musicians And Related Professionals	2537
Music Teacher (Private)	Extra-Systemic Teachers	2491
Musicians and Related Professionals nec	Musicians And Related Professionals	2537
Nanny	Children's Care Workers	6312
Natural and Physical Science Professionals nec	Other Natural And Physical Science Professionals	2119
Natural Remedy Consultant	Personal Care Consultants	6395
Natural Therapy Professionals nec	Natural Therapy Professionals	2394
Naturopath	Natural Therapy Professionals	2394
Naval Architect	Other Building And Engineering Professionals	2129
Nuclear Medicine Technologist	Medical Imaging Professionals	2391
Nurse Educator	Nurse Educators And Researchers	2322
Nurse Manager	Nurse Managers	2321
Nurse Researcher	Nurse Educators And Researchers	2322
Nurseryperson	Nurserypersons	4621
Nursing Assistant	Personal Care And Nursing Assistants	6314
Obstetrician and Gynaecologist	Specialist Medical Practitioners	2312
Occupational Health and Safety Officer	Occupational And Environmental Health Professionals	2543
Occupational Therapist	Occupational Therapists	2383
Oenologist	Other Professionals	2549
Office Cashier	Checkout Operators And Cashiers	8291
Office Manager	Office Managers	3291
Office Trainee	Office Trainees	8116
Ophthalmologist	Specialist Medical Practitioners	2312
Optical Mechanic	Other Miscellaneous Tradespersons And Related Workers	4999
Optometrist	Optometrists	2384
Order Clerk	Stock And Purchasing Clerks	6153
Organisation and Methods Analyst	Business And Organisation Analysts	2294
Organisational Psychologist	Psychologists	2514
Orthoptist	Other Health Professionals	2399
Orthotist	Other Health Professionals	2399
Osteopath	Chiropractors And Osteopaths	2387
Other Hospitality and Accommodation Managers	Other Hospitality And Accommodation Managers	3329
Other Sports Centre Manager	Sport And Recreation Managers	3391
Other Sports Coach	Sportspersons, Coaches And Related Support Workers	3993
Other Sports Official	Sportspersons, Coaches And Related Support Workers	3993
Other Sportsperson	Sportspersons, Coaches And Related Support Workers	3993
Outdoor Adventure Leader	Fitness Instructors And Related Workers	6396
Packager and Container Filler	Packagers And Container Fillers	9222
Paediatrician	Specialist Medical Practitioners	2312
Painter (Visual Arts)	Visual Arts And Crafts Professionals	2531
Painter and Decorator	Painters And Decorators	4421

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Panel Beater	Panel Beaters	4213
Paper Mill Operator	Pulp And Paper Mill Operators	7124
Paper Products Machine Operator	Paper Products Machine Operators	7295
Park Ranger	Environmental And Agricultural Science Professionals	2114
Parking Inspector	Other Elementary Clerks	8119
Parliamentarian or Councillor	Legislators And Government Appointed Officials	1111
Parole or Probation Officer	Welfare Associate Professionals	3421
Pastrycook	Bakers And Pastrycooks	4512
Pastrycook's Assistant	Food Trades Assistants	9933
Patents Examiner	Other Professionals	2549
Pathologist	Specialist Medical Practitioners	2312
Patternmaker-Grader (Clothing)	Clothing Tradespersons	4941
Paving and Surfacing Labourer	Paving And Surfacing Labourers	9913
Paving Plant Operator	Mobile Construction Plant Operators	7111
Payroll Clerk	Payroll Clerks	6142
Performing Arts Support Workers nec	Performing Arts Support Workers	4992
Personal Assistant	Secretaries And Personal Assistants	5111
Personal Care Assistant	Personal Care And Nursing Assistants	6314
Personnel Consultant	Human Resource Professionals	2291
Personnel Officer	Human Resource Professionals	2291
Personnel Records Clerk	Personnel Clerks	6193
Pest and Weed Controller	Other Intermediate Service Workers	6399
Petroleum and Gas Plant Operator	Chemical, Petroleum And Gas Plant Operators	4987
Petroleum Engineer	Mining And Materials Engineers	2127
Photographer	Photographers	2532
Photographer's Assistant	Other Miscellaneous Advanced Clerical And Service Workers	5999
Photographic Developer and Printer	Photographic Developers And Printers	7298
Physical Metallurgist	Other Natural And Physical Science Professionals	2119
Physicist	Other Natural And Physical Science Professionals	2119
Physiotherapist	Physiotherapists	2385
Piano Tuner	Other Miscellaneous Tradespersons And Related Workers	4999
Picture Framer	Other Wood Tradespersons	4929
Pig Farmer	Livestock Farmers	1312
Plastic Cablemaking Machine Operator	Plastics Production Machine Operators	7291
Plastics Compounding and Reclamation Machine Operator	Plastics Production Machine Operators	7291
Plastics Production Machine Operators nec	Plastics Production Machine Operators	7291
Plumber's Assistant	Construction And Plumber's Assistants	9916
Plumbing Engineering Associate	Building, Architectural And Surveying Associate Professionals	3121
Plumbing Inspector	Building, Architectural And Surveying Associate Professionals	3121
Podiatrist	Podiatrists	2388

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Police Officer	Police Officers	3911
Policy Analyst	Other Business And Information Professionals	2299
Policy and Planning Manager	Policy And Planning Managers	1291
Post Office Manager	Other Managing Supervisors (Sales And Service)	3399
Postal Delivery Officer	Messengers	8114
Postal Sorting Officer	Mail Sorting Clerks	8112
Potter or Ceramic Artist	Visual Arts And Crafts Professionals	2531
Poultry Farmer	Livestock Farmers	1312
Poultry Process Worker	Meat And Fish Process Workers	9213
Power Generation Plant Operator	Power Generation Plant Operators	4988
Precision Instrument Maker and Repairer	Precision Metal Tradespersons	4115
Pre-Primary School Teacher	Pre-Primary School Teachers	2411
Pre-School Aide	Education Aides	6311
Pressure Welder	Structural Steel And Welding Tradespersons	4122
Primary Products Inspector	Primary Products Inspectors	3991
Primary School Teacher	Primary School Teachers	2412
Print Journalist	Journalists And Related Professionals	2534
Printer's Assistant	Printing Hands	7996
Printing Machinist	Printing Machinists And Small Offset Printers	4912
Printing Table Hand	Printing Hands	7996
Prison Officer	Prison Officers	6393
Private Investigator	Other Miscellaneous Associate Professionals	3999
Process Workers nec	Other Process Workers	9219
Product Assembler	Product Assemblers	9212
Product Examiner	Product Quality Controllers	7992
Product Grader	Product Quality Controllers	7992
Product Tester	Product Quality Controllers	7992
Production Assistant (Film, Television or Radio)	Performing Arts Support Workers	4992
Production Assistant (Theatre)	Performing Arts Support Workers	4992
Production Manager (Manufacturing)	Production Managers	1222
Production Manager (Mining)	Production Managers	1222
Production or Plant Engineer	Mechanical, Production And Plant Engineers	2126
Production Recording Clerk	Production Recording Clerks	6151
Professionals nec	Other Professionals	2549
Program Director (Radio or Television)	Film, Television, Radio And Stage Directors	2536
Project Builder	Building And Construction Managers	1191
Project or Program Administrator	Project And Program Administrators	3292
Proof Reader	Other Intermediate Clerical Workers	6199
Property Manager	Real Estate Associate Professionals	3293
Prostitute or Escort	Other Elementary Service Workers	8319
Psychiatrist	Specialist Medical Practitioners	2312

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Psychologists nec	Psychologists	2514
Public Relations Officer	Marketing And Advertising Professionals	2221
Pulp and Paper Mill General Hand	Wood Products Factory Hands	9215
Pulp Mill Operator	Pulp And Paper Mill Operators	7124
Purchasing Officer	Stock And Purchasing Clerks	6153
Quality Assurance Manager	Business And Organisation Analysts	2294
Quantity Surveyor	Quantity Surveyors	2122
Radiation Therapist	Medical Imaging Professionals	2391
Radio Despatcher	Other Miscellaneous Advanced Clerical And Service Workers	5999
Radio Journalist	Journalists And Related Professionals	2534
Radio Operator	Other Miscellaneous Associate Professionals	3999
Radio Presenter	Media Presenters	2539
Radiologist	Specialist Medical Practitioners	2312
Railway Labourer	Railway Labourers	9915
Railway Signal Operator	Other Intermediate Stationary Plant Operators	7129
Railway Station Manager	Other Managing Supervisors (Sales And Service)	3399
Railway Track Repair Mobile Plant Operator	Other Mobile Plant Operators	7119
Railways Assistant	Other Elementary Service Workers	8319
Real Estate Agency Manager	Real Estate Associate Professionals	3293
Real Estate Salesperson	Real Estate Associate Professionals	3293
Receiving and Despatching Clerk	Transport And Despatching Clerks	6152
Receptionist	Receptionists	6131
Records Manager	Other Business And Information Professionals	2299
Recreation Officer	Other Professionals	2549
Refrigeration and Airconditioning Mechanic	Refrigeration And Airconditioning Mechanics	4312
Refuge Worker	Special Care Workers	6313
Regional Education Manager	Education Managers	1293
Registered Developmental Disability Nurse	Registered Developmental Disability Nurses	2326
Registered Mental Health Nurse	Registered Mental Health Nurses	2325
Registered Midwife	Registered Midwives	2324
Registered Nurse	Registered Nurses	2323
Registry or Filing Clerk	Registry And Filing Clerks	8111
Rehabilitation Counsellor	Counsellors	2513
Reinforced Plastic and Composite Production Worker	Plastics Production Machine Operators	7291
Rental Salesperson	Other Elementary Sales Workers	8299
Research and Development Manager	Other Specialist Managers	1299
Residential Care Officer	Welfare Associate Professionals	3421
Restaurant and Catering Manager	Restaurant And Catering Managers	3321
Retail Buyer	Retail Buyers	3996
Retail Pharmacist	Pharmacists	2382

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Retail Supervisor	Retail And Checkout Supervisors	6213
Road Roller Operator	Mobile Construction Plant Operators	7111
Roof Plumber	Plumbers	4431
Roof Slater and Tiler	Roof Slaters And Tilers	4413
Rubber and Plastics Factory Hand	Other Process Workers	9219
Rubber Production Machine Operators nec	Rubber Production Machine Operators	7292
Rural Trainee	Other Agricultural And Horticultural Labourers	9929
Safety Inspector	Safety Inspectors	3992
Sail Maker	Leather Goods, Canvas Goods And Sail Makers	4944
Sales and Marketing Manager	Sales And Marketing Managers	1231
Sales and Service Trainee	Sales And Service Trainees	8297
Sales Assistant (Fabric, Clothing and Footwear)	Sales Assistants	8211
Sales Assistant (Food and Drink Products)	Sales Assistants	8211
Sales Assistant (Other Personal and Household Goods)	Sales Assistants	8211
Sales Assistant (Postal Services)	Sales Assistants	8211
Sales Assistants nec	Sales Assistants	8211
Sales Clerk	Stock And Purchasing Clerks	6153
Sales Demonstrator	Sales Demonstrators And Models	8295
Sales Representative (Builder's and Plumber's Supplies)	Sales Representatives	6211
Sales Representative (Business Services)	Sales Representatives	6211
Sales Representative (Industrial Products)	Technical Sales Representatives	2222
Sales Representative (Information and Communication Products)	Technical Sales Representatives	2222
Sales Representative (Medical and Pharmaceutical Products)	Technical Sales Representatives	2222
Sales Representative (Motor Vehicle Parts and Accessories)	Sales Representatives	6211
Sales Representative (Personal and Household Goods)	Sales Representatives	6211
Sales Representatives nec	Sales Representatives	6211
Saw Maker and Repairer	Precision Metal Tradespersons	4115
Sawmill Labourer	Wood Products Factory Hands	9215
Scaffolder	Structural Steel Construction Workers	7913
School Principal	Education Managers	1293
Science Technical Officers nec	Science Technical Officers	3112
Screen Printer	Screen Printers	4914
Script Editor	Authors And Related Professionals	2535
Sculptor	Visual Arts And Crafts Professionals	2531
Sea Transport Professionals nec	Sea Transport Professionals	2542
Seafarer	Seafarers And Fishing Hands	7994
Secondary School Teacher	Secondary School Teachers	2413
Secretary	Secretaries And Personal Assistants	5111
Security Adviser	Other Miscellaneous Associate Professionals	3999
Security Officer	Guards And Security Officers	8311

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Senior Fire Fighter	Senior Fire Fighters	3995
Senior Non-Commissioned Defence Force Officer	No job reports available for this occupation	3994
Service Station Attendant	Service Station Attendants	8296
Sewing Machinist	Sewing Machinists	7211
Shearer	Shearers	4612
Shearing Shed Hand	Farm Hands	9921
Sheep Farmer	Livestock Farmers	1312
Sheetmetal Worker (First Class)	Sheetmetal Tradespersons	4124
Ship's Engineer	Sea Transport Professionals	2542
Ship's Master	Sea Transport Professionals	2542
Ship's Officer	Sea Transport Professionals	2542
Ship's Surveyor	Sea Transport Professionals	2542
Shipwright	Marine Construction Tradespersons	4981
Shoemaker	Footwear Tradespersons	4943
Shooter-Trapper	Other Agricultural And Horticultural Labourers	9929
Shop Manager	Shop Managers	3311
Sign Erector	Other Miscellaneous Labourers And Related Workers	9999
Signwriter	Signwriters	4422
Singer	Musicians And Related Professionals	2537
Slaughterperson	Meat Tradespersons	4511
Small Offset Printer	Printing Machinists And Small Offset Printers	4912
Smallgoods Maker	Meat Tradespersons	4511
Social Professionals nec	Other Social Professionals	2529
Social Security Assessor	Intermediate Inspectors And Examiners	6194
Social Worker	Social Workers	2511
Software Designer	Computing Professionals	2231
Soil Scientist	Environmental And Agricultural Science Professionals	2114
Solicitor	Legal Professionals	2521
Solid Plasterer	Solid Plasterers	4415
Sonographer	Medical Imaging Professionals	2391
Sound Technician	Performing Arts Support Workers	4992
Special Education Teachers nec	Special Education Teachers	2414
Special Needs Teacher	Special Education Teachers	2414
Specialist Managers nec	Other Specialist Managers	1299
Specialist Medical Practitioners nec	Specialist Medical Practitioners	2312
Specialist Physician	Specialist Medical Practitioners	2312
Speech Pathologist	Speech Pathologists	2386
Sport and Recreation Managers nec	Sport And Recreation Managers	3391
Sports Administrator	Other Specialist Managers	1299
Sports Development Officer	Sportspersons, Coaches And Related Support Workers	3993
Sports Umpire	Sportspersons, Coaches And Related Support Workers	3993

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Stage Manager	Film, Television, Radio And Stage Directors	2536
Statistical Clerk	Money Market And Statistical Clerks	6145
Statistician	Mathematicians, Statisticians And Actuaries	2293
Steel Fixer	Structural Steel Construction Workers	7913
Sterilisation Technology Worker	Other Elementary Service Workers	8319
Stock and Station Agent	Other Managing Supervisors (Sales And Service)	3399
Stock Clerk	Stock And Purchasing Clerks	6153
Stockbroking Dealer	Financial Dealers And Brokers	3212
Stone Processing Machine Operator	Clay, Stone And Concrete Processing Machine Operators	7297
Stonemason	Wall And Floor Tilers And Stonemasons	4416
Storeperson	Storepersons	7993
Stormwater, Drainage and Sewerage System Labourer	Other Miscellaneous Labourers And Related Workers	9999
Street Vendor	Street Vendors And Related Workers	8293
Streetsweeper Operator	Other Mobile Plant Operators	7119
Structural Steel Erector	Structural Steel Construction Workers	7913
Stud Hand or Stable Hand	Farm Hands	9921
Student Counsellor	Counsellors	2513
Sugar Cane Grower	Crop Farmers	1313
Supervisor, Accounting Clerks	Accounting Clerks	6141
Supervisor, Aircraft Maintenance Engineers	Aircraft Maintenance Engineers	4114
Supervisor, Automotive Electricians	Automotive Electricians	4212
Supervisor, Bakers and Pastrycooks	Bakers And Pastrycooks	4512
Supervisor, Bank Workers	Bank Workers	6143
Supervisor, Bar Attendants	Bar Attendants	6322
Supervisor, Bricklayers	Bricklayers	4414
Supervisor, Cabinetmakers	Cabinetmakers	4922
Supervisor, Carpentry and Joinery Tradespersons	Carpentry And Joinery Tradespersons	4411
Supervisor, Chemical Production Machine Operators	Chemical Production Machine Operators	7293
Supervisor, Chemical, Petroleum and Gas Plant Operators	Chemical, Petroleum And Gas Plant Operators	4987
Supervisor, Clay, Stone and Concrete Processing Machine Operators	Clay, Stone And Concrete Processing Machine Operators	7297
Supervisor, Communications Tradespersons	Communications Tradespersons	4316
Supervisor, Drillers	Drillers	4986
Supervisor, Electrical Distribution Tradespersons	Electrical Distribution Tradespersons	4313
Supervisor, Electricians	Electricians	4311
Supervisor, Electronic and Office Equipment Tradespersons	Electronic And Office Equipment Tradespersons	4315
Supervisor, Electronic Instrument Tradespersons	Electronic Instrument Tradespersons	4314
Supervisor, Engineering Production Systems Workers	Engineering Production Systems Workers	7123
Supervisor, Fibrous Plasterers	Fibrous Plasterers	4412
Supervisor, Floor Finishers	Floor Finishers	4423
Supervisor, Forestry and Logging Workers	Forestry And Logging Workers	7995

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Supervisor, Forging Tradespersons	Forging Tradespersons	4123
Supervisor, General Fabrication Engineering Tradespersons	General Fabrication Engineering Tradespersons	4121
Supervisor, General Mechanical Engineering Tradespersons	General Mechanical Engineering Tradespersons	4111
Supervisor, Glass Production Machine Operators	Glass Production Machine Operators	7296
Supervisor, Hairdressers	Hairdressers	4931
Supervisor, Insurance Clerks	Insurance Clerks	6144
Supervisor, Meat Tradespersons	Meat Tradespersons	4511
Supervisor, Metal Casting Tradespersons	Metal Casting Tradespersons	4125
Supervisor, Metal Finishing Tradespersons	Metal Finishing Tradespersons	4126
Supervisor, Metal Fitters and Machinists	Metal Fitters And Machinists	4112
Supervisor, Money Market and Statistical Clerks	Money Market And Statistical Clerks	6145
Supervisor, Motor Mechanics	Motor Mechanics	4211
Supervisor, Other Intermediate Stationary Plant Operators	Other Intermediate Stationary Plant Operators	7129
Supervisor, Painters and Decorators	Painters And Decorators	4421
Supervisor, Panel Beaters	Panel Beaters	4213
Supervisor, Plastics Production Machine Operators	Plastics Production Machine Operators	7291
Supervisor, Plumbers	Plumbers	4431
Supervisor, Police Officers	Police Officers	3911
Supervisor, Power Generation Plant Operators	Power Generation Plant Operators	4988
Supervisor, Precision Metal Tradespersons	Precision Metal Tradespersons	4115
Supervisor, Refrigeration and Airconditioning Mechanics	Refrigeration And Airconditioning Mechanics	4312
Supervisor, Roof Slaters and Tilers	Roof Slaters And Tilers	4413
Supervisor, Rubber Production Machine Operators	Rubber Production Machine Operators	7292
Supervisor, Sewing Machinists	Sewing Machinists	7211
Supervisor, Sheetmetal Tradespersons	Sheetmetal Tradespersons	4124
Supervisor, Signwriters	Signwriters	4422
Supervisor, Solid Plasterers	Solid Plasterers	4415
Supervisor, Stock and Purchasing Clerks	Stock And Purchasing Clerks	6153
Supervisor, Storepersons	Storepersons	7993
Supervisor, Structural Steel and Welding Tradespersons	Structural Steel And Welding Tradespersons	4122
Supervisor, Textile and Footwear Production Machine Operators	Textile And Footwear Production Machine Operators	7212
Supervisor, Toolmakers	Toolmakers	4113
Supervisor, Transport and Despatching Clerks	Transport And Despatching Clerks	6152
Supervisor, Vehicle Body Makers	Vehicle Body Makers	4215
Supervisor, Vehicle Painters	Vehicle Painters	4214
Supervisor, Vehicle Trimmers	Vehicle Trimmers	4216
Supervisor, Waiters	Waiters	6323
Supervisor, Wall and Floor Tilers and Stonemasons	Wall And Floor Tilers And Stonemasons	4416
Supervisor, Wood Processing Machine Operators	Wood Processing Machine Operators	7294
Supply and Distribution Manager	Supply And Distribution Managers	1223

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Surgeon	Specialist Medical Practitioners	2312
Survey Hand	Survey Hands	9914
Surveying and Cartographic Associate	Building, Architectural And Surveying Associate Professionals	3121
Surveyor	Cartographers And Surveyors	2123
Swimming Coach	Sportspersons, Coaches And Related Support Workers	3993
Switchboard Operator	Switchboard Operators	8113
Systems Designer	Computing Professionals	2231
Systems Manager	Computing Professionals	2231
Systems Programmer	Computing Professionals	2231
Tailor	Clothing Tradespersons	4941
Taxation Inspector	Intermediate Inspectors And Examiners	6194
Teacher of the Hearing Impaired	Special Education Teachers	2414
Teacher of the Sight Impaired	Special Education Teachers	2414
Teachers' Aide	Education Aides	6311
Technical Director	Film, Television, Radio And Stage Directors	2536
Technical Sales Representatives nec	Technical Sales Representatives	2222
Technical Writer	Journalists And Related Professionals	2534
Telemarketer	Telemarketers	8294
Telephone Betting Clerk	Betting Clerks	8115
Television Equipment Operator	Performing Arts Support Workers	4992
Television Journalist	Journalists And Related Professionals	2534
Television Presenter	Media Presenters	2539
Tennis Coach	Sportspersons, Coaches And Related Support Workers	3993
Textile and Footwear Production Machine Operators nec	Textile And Footwear Production Machine Operators	7212
Textile Dyeing and Finishing Machine Operator	Textile And Footwear Production Machine Operators	7212
Textile, Clothing or Footwear Mechanic	Metal Fitters And Machinists	4112
Theatre or Cinema Manager	Other Managing Supervisors (Sales And Service)	3399
Therapy Aide	Special Care Workers	6313
Ticket Collector or Usher	Ushers, Porters And Related Workers	8312
Ticket Seller	Ticket Salespersons	8292
Timberyard Labourer	Wood Products Factory Hands	9215
Tobacco Grower	Crop Farmers	1313
Toolmaker	Toolmakers	4113
Tour Guide	Travel And Tourism Agents	6397
Tourist Information Officer	Travel And Tourism Agents	6397
Tradespersons and Related Workers nec	Other Miscellaneous Tradespersons And Related Workers	4999
Train Controller	Other Intermediate Stationary Plant Operators	7129
Train Driver	Train Drivers And Assistants	7315
Train Driver's Assistant	Train Drivers And Assistants	7315
Train Examiner	Intermediate Inspectors And Examiners	6194

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Trainee Commissioned Defence Force Officer	Commissioned Officers (Management)	1294
Trainee Defence Force Member Not Elsewhere Included	No job reports available for this occupation	4991
Training Officer	Human Resource Professionals	2291
Tram Driver	Bus And Tram Drivers	7312
Translator	Other Social Professionals	2529
Transport Company Manager	Transport Company Managers	3393
Transport Conductor	Ticket Salespersons	8292
Transport Operations Inspector	Intermediate Inspectors And Examiners	6194
Travel Agency Manager	Other Managing Supervisors (Sales And Service)	3399
Travel Agent	Travel And Tourism Agents	6397
Travel Attendants nec	Travel Attendants	5996
Tree Faller	Forestry And Logging Workers	7995
Tree Surgeon	Gardeners	4623
Tribunal Member	Legislators And Government Appointed Officials	1111
Trolley Collector	Other Elementary Service Workers	8319
Truck Driver's Offsider	Freight And Furniture Handlers	9992
Trust Officer	Advanced Legal And Related Clerks	5991
Typist and Word Processing Operator	Keyboard Operators	6121
Tyre Production Machine Operator	Rubber Production Machine Operators	7292
University Lecturer	University Lecturers And Tutors	2421
University Tutor	University Lecturers And Tutors	2421
Upholsterers and Bedding Tradespersons nec	Upholsterers And Bedding Tradespersons	4942
Urban and Regional Planner	Urban And Regional Planners	2523
Valuer	Property Professionals	2295
Vegetable Grower	Crop Farmers	1313
Vehicle Body Maker	Vehicle Body Makers	4215
Vehicle Cleaner	Cleaners	9111
Vehicle Painter	Vehicle Painters	4214
Vehicle Trimmer	Vehicle Trimmers	4216
Vending Machine Attendant	Other Miscellaneous Labourers And Related Workers	9999
Veterinarian	Veterinarians	2392
Veterinary Nurse	Veterinary Nurses	6392
Visual Arts and Crafts Professionals nec	Visual Arts And Crafts Professionals	2531
Visual Merchandiser	Other Miscellaneous Advanced Clerical And Service Workers	5999
Vocational Education Teacher	Vocational Education Teachers	2422
Wall and Floor Tiler	Wall And Floor Tilers And Stonemasons	4416
Watch and Clock Maker and Repairer	Precision Metal Tradespersons	4115
Water and Waste Water Plant Operator	Other Intermediate Stationary Plant Operators	7129
Water Inspector	Intermediate Inspectors And Examiners	6194
Waterside Worker	Freight And Furniture Handlers	9992

Six-digit ASCO names	Four-digit ASCO names used in the search engine	Four-digit ASCO code
Weaving Machine Operator	Textile And Footwear Production Machine Operators	7212
Weight Loss Consultant	Personal Care Consultants	6395
Welder (First Class)	Structural Steel And Welding Tradespersons	4122
Welfare Centre Manager	Other Specialist Managers	1299
Welfare Worker	Welfare And Community Workers	2512
Wholesaler	Importers, Exporters And Wholesalers	1192
Window Cleaner	Cleaners	9111
Wood and Wood Products Factory Hand	Wood Products Factory Hands	9215
Wood Machinist (A-Grade)	Wood Machinists And Turners	4921
Wood Processing Machine Operator	Wood Processing Machine Operators	7294
Wood Tradespersons nec	Other Wood Tradespersons	4929
Wood Turner	Wood Machinists And Turners	4921
Wool Classer	Wool, Hide And Skin Classers	4613
Yarn Carding and Spinning Machine Operator	Textile And Footwear Production Machine Operators	7212
Youth Worker	Welfare Associate Professionals	3421
Zoologist	Life Scientists	2113

Industry divisions

A	Agriculture, Forestry and Fishing
B	Mining
C	Manufacturing
D	Electricity, Gas and Water Supply
E	Construction
F	Wholesale Trade
G	Retail Trade
H	Accommodation, Cafes and Restaurants
I	Transport and Storage
J	Communication Services
K	Finance and Insurance
L	Property and Business Services
M	Government Administration and Defence
N	Education
O	Health and Community Services
P	Cultural and Recreational Services
Q	Personal and Other Services

Source: ABS *Australian and New Zealand Standard Industrial Classification (ANZSIC)*

Glossary

<i>Australian Bureau of Statistics (ABS)</i>	The ABS is Australia's official national statistical agency. It provides statistics on a wide range of economic and social matters, covering government, business and the population in general.
<i>Australian and New Zealand Standard Industrial Classification (ANZSIC)</i>	The <i>ABS Australian and New Zealand Standard Industrial Classification</i> (ANZSIC) is used in both countries for the production and analysis of industry statistics.
<i>Australian Qualifications Framework (AQF)</i>	The <i>Australian Qualifications Framework</i> (AQF) is a single, coherent framework for qualifications from Senior Secondary Certificates through to Doctoral Degrees. The framework links together all these qualifications and is a quality-assured national system of educational recognition that promotes lifelong learning and a seamless and diverse education and training system. It covers qualifications issued by secondary schools, vocational education and training (VET) providers and higher education institutions. All qualifications are nationally recognised. ²
<i>Australian Standard Classification of Occupations (ASCO)</i>	The <i>Australian Standard Classification of Occupations</i> (ASCO) has been developed by the ABS for use in the collection, publication and analysis of occupational statistics. The classification is used in all ABS censuses and surveys where occupational data are collected. It is a skill-based classification of occupations which covers all jobs in the Australian workforce. Occupational information collected in surveys and the Census provides a description of a person's job and refers to the kind of work undertaken by an employed person irrespective of the industry in which that job is held. Occupations are classified according to two criteria - skill level and skill specialisation.
<i>Australian Standard Geographical Classification (ASGC)</i>	An ABS classification system for identifying States, parts of States and smaller geographical areas, in a uniform manner. ³
<i>Census</i>	A census involves collecting data from <i>everyone</i> or <i>everything</i> in a group or population. So, if you collected data about the height of <i>everyone</i> in a class room that would be regarded as a class census. Advantages of choosing a census as the method of data collection include accuracy (everyone in the group has had data collected about them and detail (detailed information about small subgroups of the population can be made available). The disadvantages are that conducting a census can be expensive and time-consuming for large populations. ⁴
<i>Census of Population and Housing</i>	The <i>Census of Population and Housing</i> is conducted every five years. ABS representatives contact every household in Australia and ask questions about everyone living in each household. The information obtained from this large and time-consuming collection process is very accurate. However, it continues to lose its currency until the next Census is held. This loss of currency primarily applies to the raw numbers and less to the proportions.
<i>Computer Numerical Control (CNC)</i>	Computer Numerical Control (CNC) has been around since the early 1970's and has touched almost every form of manufacturing process. Working in manufacturing is likely to involve CNC on a regular basis. <i>Everything</i> that an operator would be required to do with conventional machine tools is programmable with CNC machines. Once the machine is setup and running, a CNC machine is quite simple to <i>keep</i> running. With some CNC machines, even the workpiece loading process has been automated. However, CNC operators are commonly required to do other things like measuring workpieces and making adjustments to keep CNC machines running well. ⁵

² Australian National Training Authority (ANTA) www.anta.gov.au

³ ABS Statistical Clearing House <http://www.sch.abs.gov.au/SCH/A1610103.NSF/Glossary?OpenView>

⁴ ABS Statistics – A powerful edge!, 2nd edition (1331.0)

⁵ CNC Concepts, Inc., Training Materials For CNC, 2001, <http://www.cncci.com/>

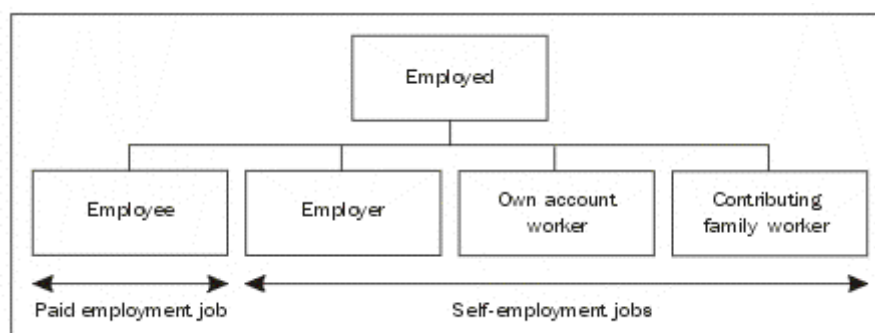
Department of Employment and Workplace Relations (DEWR) The Commonwealth Department of Employment and Workplace Relations (DEWR) provides the government with high quality advice, programmes and services to achieve an effective labour market, higher productivity, higher paid workplaces and increased workforce participation.

Employee An employee is defined by the ABS as a person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece-rates, or payment in kind; or a person who operates his or her own incorporated enterprise with or without hiring employees⁶ (see Employment status).

Employer An employer is defined by the ABS as a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees⁷ (see Employment status).

Employment status The ABS status in employment classification is illustrated in the following diagram.⁸

Australian status in employment classification



Estimate Sample survey data only relate to the units in the sample. Therefore the sample estimates need to be inflated to represent the whole population of interest. Estimation is the means by which this inflation occurs and is essentially the application of weights to the individual survey records.

Full-time workers Full-time workers are employed persons who usually worked 35 hours or more a week (in all jobs) and others who, although usually working less than 35 hours a week, worked 35 hours or more during the week of the survey.

Index An index graph is a useful type of graph as it enables comparison of underlying trends for series of different orders of magnitude. It works by bringing the first observation, in the different series being plotted, to 1.

Labour force survey (LFS) Each month the ABS releases official estimates of employment and unemployment from the Labour Force Survey (LFS), which is the largest household survey conducted by the ABS.

Own account worker An own account worker is defined by the ABS as person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees (see Employment status).

Part-time workers Part-time workers are employed persons who usually work less than 35 hours a week and who did so during the survey week.⁹

Skilled Vacancy Survey (SVS) The *Skilled Vacancies Survey* (SVS) is based on a count of skilled vacancies in the major metropolitan newspaper of each State and the Northern Territory, usually on the first Saturday of each month (the count is conducted on the second Saturday in January and when the first Saturday is part of a national long weekend).

⁶ ABS *Australian Labour Market Statistics* (6105.0)

⁷ ABS *Australian Labour Market Statistics* (6105.0)

⁸ ABS www.abs.gov.au

⁹ *Labour Force, Australia* (ABS Cat. no. 6203.0).

Statistical Division

A Statistical Division (SD) is an ABS *Australian Standard Geographical Classification* (ASGC) defined area which represents a large, general purpose, regional type geographic area. SDs represent relatively homogeneous regions characterised by identifiable social and economic links between the inhabitants and between the economic units within the region, under the unifying influence of one or more major towns or cities.¹⁰

Time series

A statistical record of a particular social or economic activity where the data is measured at regular intervals over a period of time. Data is usually recorded on a monthly or quarterly basis, though some data may be recorded weekly. Time series are collected on this basis to assist understanding of the current situation, enabling the most recent data observations to be placed in a meaningful historical perspective. Users of the data may then determine if levels or the direction of movements suggest improvement or deterioration of the current situation.¹¹

¹⁰ ABS www.abs.gov.au

¹¹ ABS Statistical Clearing House <http://www.sch.abs.gov.au/SCH/A1610103.NSF/Glossary?OpenView>