



# SINGAPORE STANDARD OCCUPATIONAL CLASSIFICATION 2015

[www.singstat.gov.sg](http://www.singstat.gov.sg)

**SINGAPORE STANDARD OCCUPATIONAL CLASSIFICATION 2015**  
**ISBN 978-981-09-4817-7**

**© Department of Statistics, Ministry of Trade & Industry, Republic of Singapore**

Reproducing or quoting any part of this publication is permitted, provided this publication is accredited as the source. Please refer to the Statistics Singapore Website Terms of Use (<http://www.singstat.gov.sg/terms-of-use>) for more details on the conditions of use of this publication.

Statistical activities conducted by the Singapore Department of Statistics are governed by the provisions of the Statistics Act (Cap. 317). The Act guarantees the confidentiality of information collected from individuals and companies. It spells out the legislative authority and responsibility of the Chief Statistician. The Act is available in the Department's Website ([www.singstat.gov.sg](http://www.singstat.gov.sg)).

## **PREFACE**

The Singapore Department of Statistics (DOS) develops national statistical standards and promotes their adoption and use in Singapore. The adoption and use of these standards in the collection, analysis and dissemination of statistics ensures consistency and comparability of data, facilitating relevant and meaningful analysis as well as data sharing.

The Singapore Standard Occupational Classification (SSOC) is the national standard for classifying occupations. The SSOC is used for censuses of population, household surveys and administrative databases. The SSOC adopts the basic framework and principles of the International Standard Classification of Occupations (ISCO) developed by the International Labour Office (ILO). It is reviewed and updated periodically to reflect developments in the labour market, particularly the emergence of new occupations as well as to align with changes in the international standard.

The SSOC 2015 is the seventh edition of the SSOC and supersedes earlier editions. This publication includes the occupational codes, scope and structure of the classification as well as descriptions of the principles. To facilitate better understanding and appropriate use of the classification, detailed write-up is provided at the unit group (four-digit) level.

The review of the SSOC was undertaken by a working group comprising representatives from many agencies, including the Singapore Department of Statistics, Central Provident Fund Board, Economic Development Board, Infocomm Development Authority of Singapore, Institute of Technical Education, Monetary Authority of Singapore, Ministry of Health, Ministry of Manpower and Singapore Workforce Development Agency. Inputs from other ministries and statutory boards have also been incorporated, where appropriate. I would like to thank all who have contributed to the review of the classification.

Wong Wee Kim  
Chief Statistician  
Singapore

April 2015

## Our Vision

**A National Statistical System of Quality, Integrity and Expertise.**

## Our Mission

**We Provide Reliable, Relevant and Timely Statistics to Support Singapore's Social and Economic Development.**

## Our Guiding Principles

<b>Professionalism &amp; Expertise</b>	<i>We adhere to professional ethics and proficiently produce quality statistics that comply with international concepts and best practices.</i>
<b>Relevance</b>	<i>We constantly innovate our processes and produce statistics that meet users' needs.</i>
<b>Accessibility</b>	<i>We make our statistics readily available.</i>
<b>Confidentiality</b>	<i>We protect the confidentiality of information provided to us.</i>
<b>Timeliness &amp; Reliability</b>	<i>We produce statistics that users can depend on and disseminate them at the earliest possible date while maintaining data quality.</i>
<b>Cost Effectiveness</b>	<i>We use resources effectively, minimising respondent burden and leveraging on administrative data.</i>

---

## CONTENTS

	Page
Preface	iii
Introduction	1
Scope of the Classification	1
Principles of the Classification	1
Structure of the Classification	2
Application of the Classification	5
Comparison with SSOC 2010	6
Classification of Occupations	
Major Group 1	9
Major Group 2	14
Major Group 3	28
Major Group 4	39
Major Group 5	43
Major Group 6	49
Major Group 7	51
Major Group 8	60
Major Group 9	69
Major Group X	73
Description of Major Groups	75
Description of Unit Groups	81
Appendix	317
Comparison between SSOC 2015 and SSOC 2010	
Alphabetical Index	355
Working Group for Revision of SSOC 2015	445

---

## SINGAPORE STANDARD OCCUPATIONAL CLASSIFICATION 2015

### Introduction

The Singapore Standard Occupational Classification (SSOC) is designed for use in the collection of data (e.g. censuses, surveys, administrative records) that requires the classification of occupations. It is also used in the compilation, presentation and analysis of a wide range of statistics, including demographic, social and labour statistics. To ensure the continuing relevance of the SSOC, the classification is revised and updated regularly, taking into account recent developments in the workforce.

2 Similar to the SSOC 2010, the SSOC 2015 adopts the basic framework of the International Standard Classification of Occupations 2008 (ISCO-08) with appropriate modifications and updates to take into account changes in Singapore's employment landscape while enhancing international comparability.

### Scope of the Classification

3 The SSOC 2015 is a classification of occupations according to the type of work performed. Its primary objective is to classify the occupations of the civilian working population. It is not applicable to the economically inactive population such as housewives, full-time students, retired persons and voluntary social workers.

### Principles of the Classification

4 The basic principle used in the classification of occupations in the SSOC 2015 is the main type of work performed. Persons who perform the same principal tasks are considered as doing the same type of work and classified under the same occupational group regardless of work experience, skills and qualifications.

5 In defining the broad types of work in the SSOC 2015, the basic concept of skill is adopted. Skill refers to the ability to carry out the tasks and duties of an occupation and has the following two dimensions:

- a **Skill level**, a function of the complexity and range of the tasks and duties involved; and
- b **Skill specialisation**, defined by the field of knowledge required, the tools and machinery used, the materials worked on or with, as well as the kinds of goods and services produced.

6 There are four broad skill levels which can be defined in operational terms as follows:

- a The **first skill level** is defined as requiring primary or no education.
- b The **second skill level** is defined as requiring secondary or post secondary education.
- c The **third skill level** is defined as requiring tertiary education leading to an award not equivalent to a first university degree.
- d The **fourth skill level** is defined as requiring tertiary education leading to a university or postgraduate university degree, or the equivalent.

7 The use of educational categories to define the four skill levels does not imply that the skills necessary to perform the tasks and duties of a given job can be acquired only through formal education. The skills may be, and often are, acquired through informal training and experience. In addition, the focus is on the skills required to carry out the tasks and duties of an occupation and not on whether a worker in a particular occupation is more or less skilled than another worker in the same occupation.

### **Structure of the Classification**

8 The SSOC 2015 comprises five levels of aggregation, namely the Major Group, Sub-major Group, Minor Group, Unit Group and Occupation.

**Major Group** (one-digit or alphabetical codes) is the highest level of aggregation and represents very broad fields of work rather than specific types of work performed. There are 10 major groups, including nine numerical groups for various occupational groups, each identified by a corresponding one-digit from 1 to 9, and a Group X for occupations not elsewhere classified.

**Sub-major Groups** (two-digit codes) are the sub-divisions of the major groups e.g. Science and Engineering Professionals (Sub-major Group 21) within the Major Group 2 'Professionals'.

**Minor Groups** (three-digit codes) are the sub-divisions within the sub-major groups e.g. Engineering Professionals (Excluding Electrotechnology) (Minor Group 214) within the Sub-major Group 21 'Science and Engineering Professionals'.

**Unit Groups** (four-digit codes) are sub-divisions of the minor groups. The classification of unit groups is finer and more detailed than that of the minor groups e.g. Civil Engineers (Unit Group 2142) within the Minor Group 214 'Engineering Professionals (Excluding Electrotechnology)'.

**Occupations** (five-digit codes) are sub-divisions of the unit groups and the most detailed grouping in SSOC.

9 The following table summarises the number of sub-groups in each major group and the skill level associated with each of them.

Major Group	Sub-Major Group	Minor Group	Unit Group	Occupation	Skill Level
1 Legislators, Senior Officials and Managers	4	11	34	75	NA
2 Professionals	7	29	98	296	4 <sup>th</sup>
3 Associate Professionals and Technicians	7	26	74	203	3 <sup>rd</sup>
4 Clerical Support Workers	5	9	22	59	2 <sup>nd</sup>
5 Service and Sales Workers	5	16	39	87	2 <sup>nd</sup>
6 Agricultural and Fishery Workers	2	4	7	19	2 <sup>nd</sup>
7 Craftsmen and Related Trades Workers	5	19	58	168	2 <sup>nd</sup>
8 Plant and Machine Operators and Assemblers	3	17	57	187	2 <sup>nd</sup>
9 Cleaners, Labourers and Related Workers	5	12	26	64	1 <sup>st</sup>
X Workers Not Elsewhere Classified	-	-	-	5	NA
<b>Total</b>	<b>43</b>	<b>143</b>	<b>415</b>	<b>1,163</b>	

10 Skill level reference is not made to Major Group 1 'Legislators, Senior Officials and Managers' as other aspects of the type of work were considered more important, i.e. policy making and management functions. As such, there could arise significant skill differences between occupations classified in this major group. Skill level reference is also not made to Major Group X as it is essentially a residual major group.

11 A numerical five-digit coding system is used to denote the different levels of classification. The numbering system is hierarchical in nature, showing the skill specialisation of an occupational group from the highest level of aggregation (one-digit) to that of a particular occupation at the most detailed level (five-digit).



This allows users the flexibility to tabulate, analyse and publish data according to the level of detail required. An example of the different levels under Major Group 2 is shown below.

<b>Classification</b>	<b>Title</b>	<b>Code</b>
Major Group	Professionals	2
Sub-Major Group	Science and Engineering Professionals	21
Minor Group	Engineering Professionals (Excluding Electrotechnology)	214
Unit Group	Civil Engineers	2142
Occupation	Civil Engineer (General)	21421
	Structural Engineer (General)	21422
	Building Construction Engineer	21423
	Soil Mechanic Engineer	21424
	Other Civil Engineers	21429

12 In cases where a given level of classification is not divided into groups or occupations at the next more detailed level of classification, the last digit of the code for the only group or occupation at the next detailed level would be '0'. For instance, the unit group 'Secretaries and Verbatim Reporters' is coded as 4120 as the minor group 'Secretaries and Verbatim Reporters' (code 412) contains only one unit group. Similarly, the occupational code for 'Glazier' is 71250 as it is the only occupation within the Unit Group 'Glaziers' (code 7125).

13 At a given level of aggregation, including the most detailed five-digit level, the digit '9' that appears in the last digit position denotes residual occupations grouped at the respective level. These residual categories usually comprise a range of the less common types of occupational groups which are not significant enough to justify a separate code. They are classified in a separate category so that no occupation, however small or insignificant, is left out of the classification scheme. The description of such codes usually ends with the term 'n.e.c.', which stands for 'not elsewhere classified'.

14 The numerical codes of the SSOC 2015 are closely aligned with the ISCO-08 to facilitate comparison between the two classifications. As such, the codes at the two, three and four-digit levels may not run consecutively if an ISCO code is not used in the SSOC. For instance, the SSOC does not contain the ISCO code 1113 'Traditional Chiefs and Heads of Village'.

## **Application of the Classification**

### *Occupations with Multiple Tasks and Duties*

15 Some occupations may involve a variety and range of tasks and duties that could fall under the specified scope of various occupations in the SSOC. In such cases, the following rules shall apply, in the order of precedence given below.

16 In cases where the tasks and duties performed require different skill levels, the job should be classified according to those tasks and duties which require the highest level of skill. For example, a job which consists of driving a van and delivering goods should be classified in unit group 8322 'Car, Taxi, Van and Light Goods Vehicle Drivers' instead of 9333 'Material and Freight Handling Workers'.

17 In cases where the tasks and duties are associated with different stages of the process of producing and distributing goods and services, the tasks and duties related to the production stage should take priority over associated tasks and duties, such as those related to the sale, marketing and transportation of the same goods. For example, a worker who bakes bread and pastries and then sells them should be classified as a baker and not a sales worker.

18 Where the tasks and duties performed are both at the same skill level and at the same stage of production, the job should be classified according to the predominant tasks performed.

### *Chief Executives, Managing Directors and General Managers*

19 Managing directors, chief executives or general managers determine and formulate policies, plan, direct and coordinate the activities of their companies or organisations. They are generally assisted by at least two other managers, and operate within guidelines from their boards or councils. Those with similar job titles but whose job scope does not fulfil the above criteria are classified in occupations corresponding to their job duties and scope of work.

### *Working Proprietors*

20 Working proprietors refer to those who operate and manage their own businesses. While working proprietors are self-employed, not all self-employed are to be classified as working proprietors. Self-employed professionals, insurance agents, real estate agents, pawnbrokers, money changers, hawkers, hair-dressers, electricians, motor car mechanics etc, who perform the principal tasks of their respective occupations are to be classified in these occupations and not as working proprietors.

## Comparison with SSOC 2010

21 A comparison of the major groups in SSOC 2015 and SSOC 2010 is shown in the following table. The number of major groups remains unchanged at ten in SSOC 2015. The description of Major Group X is amended as “Workers Not Elsewhere Classified” to better reflect the intended scope of this major group, which is to capture other occupations not classified in Major Group 1 to 9.

SSOC 2015		SSOC 2010	
1	Legislators, Senior Officials and Managers	1	Legislators, Senior Officials and Managers
2	Professionals	2	Professionals
3	Associate Professionals and Technicians	3	Associate Professionals and Technicians
4	Clerical Support Workers	4	Clerical Support Workers
5	Service and Sales Workers	5	Service and Sales Workers
6	Agricultural and Fishery Workers	6	Agricultural and Fishery Workers
7	Craftsmen and Related Trades Workers	7	Craftsmen and Related Trades Workers
8	Plant and Machine Operators and Assemblers	8	Plant and Machine Operators and Assemblers
9	Cleaners, Labourers and Related Workers	9	Cleaners, Labourers and Related Workers
X	Workers Not Elsewhere Classified	X	Workers Not Classifiable by Occupation

22 The number of sub-major (two-digit), minor (three-digit) and unit (four-digit) groups has increased slightly, which provides for more detailed breakdown at each of these levels. The number of occupations (i.e. five-digit codes) has also increased with more occupations being assigned unique codes.

	SSOC 2015	SSOC 2010
Sub-Major Group (two-digit)	43	43
Minor Group (three-digit)	143	140
Unit Group (four-digit)	415	400
Occupation (five-digit)	1,163	1,124

23 A comparison between SSOC 2015 and 2010 at the unit group level is given in the Appendix.

24 In the SSOC 2015, some occupations have been reclassified across major groups, taking into consideration the main tasks and duties of these occupations in the context of Singapore and developments in recent years. For instance, some healthcare-related occupations (e.g. registered nurses, dietitian, nutritionist, audiologist, speech therapist, optometrist, physiotherapists, occupational therapist) have been reclassified from Major Group 3 to Major Group 2 given that the nature of work are similar to those performed by their international counterparts and consistent with the tasks specified for similar occupations in Major Group 2 in ISCO-08. Another example is the reclassification of 'chef' from Major Group 5 to Major Group 3. This takes into account that most chefs undertake tasks such as planning and designing menus, organising food preparations and supervising cooks, in line with the tasks of similar occupations in Major Group 3 in ISCO-08.

25 To cater to the increase in occupations in certain fields with tasks and duties that are distinct from existing occupations in the SSOC as well as new occupations becoming more prevalent in emerging industries, separate five-digit codes have been created for them in the SSOC 2015. For instance, new five-digit codes have been created for occupations in certain fields in Major Group 1 'Legislators, Senior Officials and Managers', such as those managing wellness centres, community and country clubs, travel agencies etc, which have previously been subsumed in the residual codes. Other examples include clinical research professionals, clinical research coordinator, safety and security consultant, enterprise/solution architect, intellectual property brokers and transaction specialists. Separate codes have also been created for those handling vehicles such as parking valet, concrete mix truck driver and waste truck driver to cater to the differences in skill requirements and tasks carried out.

26 To better reflect the different tasks and duties performed by cleaners in different premises (e.g. Food and Beverage (F&B) establishments, offices, industrial establishments), separate codes have been created for them at the four-digit level. Cleaners in F&B establishments carry out tasks like clearing soiled crockery and rubbish from tables, washing of crockery while cleaners in offices perform more generic form of cleaning such as sweeping, vacuum-cleaning, washing and polishing floors, furniture and other fixtures in buildings. Cleaners in industrial establishments (e.g. factories, industrial plants) make use of specialised equipment and solvents to perform various cleaning tasks.

# Classification of Occupations

SSOC 2015	OCCUPATION	SSOC 2010
<b>1</b>	<b><u>LEGISLATORS, SENIOR OFFICIALS AND MANAGERS</u></b>	
<b>11</b>	<b>LEGISLATORS, SENIOR OFFICIALS AND CHIEF EXECUTIVES</b>	
111	LEGISLATORS AND SENIOR OFFICIALS	
1111	<u>Legislators</u>	
11110	Legislator	11110
1112	<u>Senior Government and Statutory Board Officials</u>	
11121	Senior government official	11121
11122	Senior statutory board official	11122
1114	<u>Senior Officials of Political Party Organisations</u>	
11140	Senior official of political party organisation	11140
1115	<u>Senior Officials of Employers', Workers' and Other Economic-Interest Organisations</u>	
11150	Senior official of employers', workers' and other economic-interest organisation	11150
1116	<u>Senior Officials of Humanitarian and Other Special-Interest Organisations</u>	
11160	Senior official of humanitarian and other special-interest organisation	11160
112	MANAGING DIRECTORS, CHIEF EXECUTIVES AND GENERAL MANAGERS	
1120	<u>Managing Directors, Chief Executives and General Managers</u>	
11201	Managing director/Chief executive officer	11201
11202	Company director	11202
11203	Chief operating officer/General Manager	11203
<b>12</b>	<b>ADMINISTRATIVE AND COMMERCIAL MANAGERS</b>	
121	BUSINESS SERVICES AND ADMINISTRATION MANAGERS	
1211	<u>Finance and Administration Managers</u>	
12111	Budgeting and financial accounting manager (including financial controller)	12111
12112	Administration manager	12112

SSOC 2015	OCCUPATION	SSOC 2010
1212	<u>Human Resource Managers</u>	
12121	Personnel/Human resource manager	12121
12122	Industrial relations manager	12122
12123	Training manager	12123
1213	<u>Policy and Planning Managers</u>	
12130	Policy and planning manager	12130
1219	<u>Business Services and Administration Managers Not Elsewhere Classified</u>	
12191	Premises and facilities maintenance manager (including building security manager)	12191
12192	Landscape operations manager	12192
12193	Working proprietor (business services and administrative services)	12193
12199	Other business services and administration managers n.e.c.	12199
122	SALES, MARKETING, DEVELOPMENT AND CUSTOMER SERVICE MANAGERS	
1221	<u>Sales, Marketing and Business Development Managers</u>	
12211	Sales and marketing manager	12211
12212	Business development manager	12212
1222	<u>Advertising and Public Relations Managers</u>	
12220	Advertising/Public relations manager	12220
1223	<u>Research and Development Managers</u>	
12230	Research and development manager	12230
1224	<u>Customer Service and Call Centre Managers</u>	
12241	Customer service manager	12241
12242	Call centre manager	12242

SSOC 2015	OCCUPATION	SSOC 2010
<b>13</b>	<b>PRODUCTION AND SPECIALISED SERVICES MANAGERS</b>	
131	PRODUCTION MANAGERS IN AGRICULTURE AND FISHERIES	
1310	<u>Production Managers in Agriculture and Fisheries</u>	
13101	Production manager in agriculture and fisheries	13101
13102	Working proprietor (agriculture and fisheries)	13102
132	MANUFACTURING, CONSTRUCTION, TRANSPORT, DISTRIBUTION AND OTHER PRODUCTION AND OPERATIONS MANAGERS	
1321	<u>Manufacturing Managers</u>	
13211	Manufacturing plant/production manager	13211
13212	Working proprietor (manufacturing)	13212
1323	<u>Construction Managers</u>	
13231	Building and construction project manager	13231
13232	Working proprietor (construction)	13232
1324	<u>Transport, Supply, Distribution and Related Managers</u>	
13241	Supply and distribution/Logistics/Warehousing manager	13241
13242	Procurement/Purchasing manager	13242
13243	Transport operations manager	13243
13244	Postal service manager	13244
13245	Working proprietor (transport, storage and courier)	13245
1329	<u>Production and Operations Managers Not Elsewhere Classified</u>	
13291	Technical/Engineering services manager (eg shipyard manager)	13291
13292	Quality assurance manager	13292
13299	Other production and operations managers n.e.c. (eg mining manager)	13299
133	INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICE MANAGERS	
1330	<u>Information and Communications Technology Service Managers</u>	
13301	Chief information officer/Chief technology officer/Chief security officer	13301
13302	Software and applications manager	13302
13303	Network and communications manager	13303
13304	IT service manager	13304
13305	Working proprietor (information and communications technology service)	13305



SSOC 2015	OCCUPATION	SSOC 2010
134	PROFESSIONAL, FINANCIAL, COMMUNITY AND SOCIAL SERVICES MANAGERS	
1341	<u>Child Care Services Managers</u>	
13410	Child care services manager	13410
1342	<u>Health Services Managers</u>	
13420	Health services manager	13420
1343	<u>Aged Care Services Managers</u>	
13430	Aged care services manager	13430
1344	<u>Social Welfare Managers</u>	
13440	Social welfare manager	13440
1345	<u>Education and Training Institution Managers</u>	
13451	School principal	13451
13459	Other education managers (including registrars, deans of education institutions and heads of training institutions)	13459
1346	<u>Financial and Insurance Services Managers</u>	
13460	Financial/Insurance services manager (eg financial institution branch manager)	13460
1349	<u>Professional, Financial, Community and Social Services Managers Not Elsewhere Classified</u>	
13491	Working proprietor (professional, financial, community and social services)	13491
13499	Other professional, financial, community and social services managers	13499

SSOC 2015	OCCUPATION	SSOC 2010
<b>14</b>	<b>HOSPITALITY, RETAIL AND RELATED SERVICES MANAGERS</b>	
141	HOTEL AND FOOD AND BEVERAGES SERVICES MANAGERS	
1411	<u>Hotel Operations and Lodging Services Managers</u>	
14111	Hotel operations/Lodging services manager	14111
14112	Working proprietor (lodging services)	14112
1412	<u>Food and Beverages Services Managers</u>	
14121	Restaurant manager	14121
14122	Catering services manager	14122
14123	Working proprietor (restaurant and other catering services)	14123
142	RETAIL AND WHOLESALE TRADE MANAGERS	
1420	<u>Retail and Wholesale Trade Managers</u>	
14201	Retail/Shop sales manager	14201
14202	Wholesale trade manager	14202
14203	Working proprietor (retail trade)	14203
14204	Working proprietor (wholesale trade)	14204
143	OTHER SERVICES MANAGERS	
1431	<u>Sports Centre Managers</u>	
14310	Sports centre manager	14310
1432	<u>Recreation Centre Managers</u>	
14321	Casino operations manager	14321
14322	Amusement/Theme park manager	14322
14323	Cinema manager	14323
14324	Park/Garden/Nature reserve manager	14324
14325	Discotheque/Karaoke/Nightclub manager	14325
14326	Wellness centre manager (eg hair/beauty/slimming/spa/manicure/ massage)	14329 (part)
14327	Community/Country club manager	14329 (part)
14329	Other recreation centre managers	14329 (part)
1433	<u>Arts and Cultural Centre Managers</u>	
14330	Arts and cultural centre manager (including gallery and museum manager)	14330
1439	<u>Other Services Managers Not Elsewhere Classified</u>	
14391	Working proprietor (sports, recreation, arts and other services)	14391
14392	Travel agency manager	14399 (part)
14399	Other services managers n.e.c.	14399 (part)

SSOC 2015	OCCUPATION	SSOC 2010
<b>2</b>	<b><u>PROFESSIONALS</u></b>	
<b>21</b>	<b>SCIENCE AND ENGINEERING PROFESSIONALS</b>	
211	PHYSICAL AND EARTH SCIENCE PROFESSIONALS	
2111	<u>Physicists and Astronomers</u>	
21110	Physicist/Astronomer	21110
2112	<u>Meteorologists</u>	
21120	Meteorologist	21120
2113	<u>Chemists</u>	
21130	Chemist	21130
2114	<u>Geologists, Geophysicists and Other Physical Science Professionals</u>	
21141	Geologist	21141
21142	Geophysicist	21142
21149	Other physical science professionals	21149
212	MATHEMATICIANS, ACTUARIES, STATISTICIANS AND OTHER RELATED PROFESSIONALS	
2121	<u>Mathematicians, Operations Research Analysts and Actuaries</u>	
21211	Mathematician	21211
21212	Operations research analyst	21212
21213	Actuary	21213
2122	<u>Statisticians</u>	
21220	Statistician	21220
2123	<u>Other Statistical, Mathematical and Actuarial Professionals</u>	
21231	Statistical officer	33141
21232	Research officer (statistical)	33142
21239	Other statistical, mathematical and actuarial professionals	33149

SSOC 2015	OCCUPATION	SSOC 2010
213	LIFE SCIENCE PROFESSIONALS	
2131	<u>Biologists, Botanists, Zoologists and Related Professionals</u>	
21311	Biologist (general)	21311
21312	Botanist	21312
21313	Zoologist	21313
21319	Other biologists, botanists, zoologists and related professionals	21319
2132	<u>Farming, Forestry and Fishery Advisers</u>	
21321	Agronomist	21321
21322	Horticulturist/Arborist	21322
21323	Plant pathologist	21323
21324	Soil scientist	21324
21325	Floriculturist/Orchidologist	21325
21326	Plant tissue culturist	21326
21327	Aquaculturist	21327
21329	Other farming, forestry and fishery advisers	21329
2133	<u>Environmental Protection and Related Professionals</u>	
21331	Environmental officer (environmental protection)	21331
21332	Environment research scientist (eg ecologist)	21332
21333	Energy manager	21333
21339	Other environmental protection and related professionals	21339
2134	<u>Pharmacologists and Related Professionals</u>	
21341	Pharmacologist	21341
21342	Anatomist	21342
21343	Biochemist	21343
21344	Physiologist	21344
21345	Animal scientist	21345
21346	Medical scientist	21346
21347	Clinical research professionals	new item
21349	Other pharmacologists and related professionals	21349
214	ENGINEERING PROFESSIONALS (EXCLUDING ELECTROTECHNOLOGY)	
2141	<u>Industrial and Production Engineers</u>	
21411	Manufacturing engineer (general)	21411
21412	Production engineer	21412
21413	Automation engineer	21413
21414	Quality control/assurance engineer	21414
21419	Other industrial and production engineers	21419

SSOC 2015	OCCUPATION	SSOC 2010
2142	<u>Civil Engineers</u>	
21421	Civil engineer (general)	21421
21422	Structural engineer (general)	21422
21423	Building construction engineer	21423
21424	Soil mechanic/Piling engineer	21424
21429	Other civil engineers	21429
2143	<u>Environmental Engineers</u>	
21431	Environmental engineer	21431
21432	Sewerage/Sanitary engineer	21432
2144	<u>Mechanical Engineers</u>	
21441	Mechanical engineer (general)	21441
21442	Industrial machinery and tools engineer	21442
21443	Marine engineer (shore-based)	21443
21444	Naval architect	21444
21445	Aeronautical engineer	21445
21446	Automotive engineer	21446
21447	Air-conditioning/Refrigeration engineer	21447
21449	Other mechanical engineers	21449
2145	<u>Chemical Engineers</u>	
21451	Chemical engineer (general)	21451
21452	Chemical engineer (petroleum)	21452
21453	Chemical engineer (petrochemicals)	21453
21459	Other chemical engineers	21459
2146	<u>Mining Engineers, Metallurgists and Related Professionals</u>	
21461	Petroleum/Natural gas engineer	21461
21462	Metallurgist	21462
21469	Other mining engineers, metallurgists and related professionals	21469
2149	<u>Engineering Professionals Not Elsewhere Classified</u>	
21491	Biomedical engineer	21491
21492	Materials engineer	21492
21493	Industrial safety engineer	21493
21494	Quantity surveyor	21494
21495	Ceramics/Glass technologist	21495
21496	Food and drink technologist	21496
21497	Optical engineer (including laser engineer)	21499 (part)
21498	Safety and security consultant	new item
21499	Other engineering professionals n.e.c.	21499 (part)

SSOC 2015	OCCUPATION	SSOC 2010
215	<b>ELECTROTECHNOLOGY ENGINEERS</b>	
2151	<u>Electrical Engineers</u>	
21511	Electrical engineer (general)	21511
21512	Power generation and distribution engineer	21512
21513	Lift engineer	21513
21519	Other electrical engineers	21519
2152	<u>Electronics Engineers</u>	
21521	Electronics engineer (general)	21521
21522	Computer engineer	21522
21523	Semi-conductor engineer	21523
21524	Audio and video equipment engineer	21524
21525	Instrumentation engineer	21525
21526	Embedded systems engineer	21526
21529	Other electronics engineers	21529
2153	<u>Telecommunications Engineers</u>	
21530	Telecommunications engineer	21530
216	<b>ARCHITECTS, PLANNERS, SURVEYORS AND DESIGNERS</b>	
2161	<u>Building Architects</u>	
21610	Building architect	21610
2162	<u>Landscape Architects</u>	
21620	Landscape architect	21620
2163	<u>Fashion, Garment and Product Designers</u>	
21631	Fashion/Garment designer (including jewellery designer)	34351
21632	Product and industrial designer	34352
2164	<u>Town and Related Planners</u>	
21641	Town planner	21641
21649	Other related planners (eg traffic planner)	21649
2165	<u>Surveyors and Cartographers</u>	
21651	Surveyor (general)	21651
21652	Land surveyor	21652
21653	Hydrographic surveyor	21653
21654	Cartographer	21654
21659	Other surveyors and cartographers	21659

SSOC 2015	OCCUPATION	SSOC 2010
2166	<u>Graphic and Multimedia Designers and Artists</u>	
21661	Graphic designer	34361
21662	Multimedia (including computer games) designer	34362
21663	Multimedia artist	34363
21664	Animator	34364
21665	Interaction/User experience designer	34369 (part)
21666	Commercial artist	34391
21669	Other graphic and multimedia designers and artists	34369 (part)
217	<b>SHIP AND AIRCRAFT RELATED PROFESSIONALS</b>	
2171	<u>Ship Engineers and Related Professionals</u>	
21711	Chief engineer (ship)	31511
21712	Marine superintendent engineer	31513
21713	Ship captain	31521
21714	Marine superintendent (deck)	31524
2172	<u>Aircraft Pilots and Related Professionals</u>	
21721	Commercial airline pilot	31531
21722	Aircraft pilot (except commercial airline and air force)	31532
21723	Flight navigator	31533
21724	Flight engineer	31534
21725	Flying instructor (except air force)	31535
21729	Other aircraft pilots and related associate professionals	31539
<b>22</b>	<b>HEALTH PROFESSIONALS</b>	
221	<b>MEDICAL DOCTORS</b>	
2211	<u>Generalist Medical Practitioners</u>	
22110	General practitioner/physician	22110
2212	<u>Specialist Medical Practitioners (Medical)</u>	
22121	Cardiologist	22121
22122	Dermatologist	22122
22123	Gastroenterologist	22123
22124	Internal medicine physician	22124
22125	Medical oncologist	22125
22126	Paediatrician	22126
22127	Respiratory physician	22127
22128	Psychiatrist	22128
22129	Other specialist medical practitioners (medical) (eg endocrinologist, geriatrician, haematologist, infectious diseases physician, neurologist, nuclear medicine physician, rehabilitation physician, renal physician, rheumatologist)	22129

SSOC 2015	OCCUPATION	SSOC 2010
2213	<u>Specialist Medical Practitioners (Surgical)</u>	
22131	General surgeon	22131
22132	Cardiothoracic surgeon	22132
22133	Hand surgeon	22133
22134	Neurosurgeon	22134
22135	Orthopaedic surgeon	22135
22136	Paediatric surgeon	22136
22137	Plastic surgeon	22137
22138	Urologist	22138
22139	Other specialist medical practitioners (surgical)	22139
2214	<u>Specialist Medical Practitioners (Other Specialisations) - I</u>	
22141	Anaesthesiologist	22141
22142	Diagnostic radiologist	22142
22143	Emergency physician	22143
22144	Obstetrician/Gynaecologist	22144
22145	Ophthalmologist	22145
22146	Pathologist	22146
22147	Public health physician	22147
22148	Otorhinolaryngologist/Ear, nose, throat (ENT) specialist	22148
2215	<u>Specialist Medical Practitioners (Other Specialisations) - II (Con'td)</u>	
22151	Sports physician	22149 (part)
22159	Other specialist medical practitioners (other specialisations) (eg occupational physician, radiation oncologist)	22149 (part)
222	NURSING PROFESSIONALS	
2220	<u>Nursing Professionals</u>	
22200	Registered nurse and other nursing professionals (eg clinical nurse, nurse educator, excluding enrolled nurse)	32201
223	TRADITIONAL AND COMPLEMENTARY MEDICINE PROFESSIONALS	
2230	<u>Traditional and Complementary Medicine Professionals</u>	
22301	Traditional Chinese medicine practitioner	22301
22302	Traditional Chinese medicine acupuncturist	22302
225	VETERINARIANS	
2250	<u>Veterinarians</u>	
22500	Veterinarian	22500



SSOC 2015	OCCUPATION	SSOC 2010
226	OTHER HEALTH PROFESSIONALS	
2261	<u>Dentists</u>	
22611	Dentist (general)	22611
22612	Specialised dentist (eg orthodontist)	22612
2262	<u>Pharmacists</u>	
22621	Pharmacist (patient care)	22621
22629	Other pharmacists	22629
2263	<u>Environmental and Occupational Health and Hygiene Professionals</u>	
22631	Occupational health professional (eg occupational hygienists and occupational hygiene officer)	22631
22632	Environmental officer (public health)	22632
22639	Other environmental and occupational health and hygiene professionals	22639
2264	<u>Physiotherapists and Related Professionals</u>	
22641	Physiotherapist	32551
22649	Other physical therapists and related professionals	32559 (part)
2265	<u>Dietitians and Nutritionists</u>	
22651	Dietitian	32521
22652	Nutritionist	32522
2266	<u>Audiologists and Speech Therapists</u>	
22661	Audiologist	32531
22662	Speech therapist	32532
2267	<u>Optometrists</u>	
22670	Optometrist	32541
2268	<u>Occupational Therapists</u>	
22680	Occupational therapist	32560
2269	<u>Other Health Professionals Not Elsewhere Classified</u>	
22691	Osteopath	32591
22692	Chiropractor	32592
22693	Podiatrist	32593
22694	Medical diagnostic radiographer	32111
22695	Radiation therapist	32112
22699	Other health professionals n.e.c.	22690

SSOC 2015	OCCUPATION	SSOC 2010
<b>23</b>	<b>TEACHING AND TRAINING PROFESSIONALS</b>	
231	UNIVERSITY, POLYTECHNIC AND HIGHER EDUCATION TEACHERS	
2310	<u>University, Polytechnic and Higher Education Teachers</u>	
23101	University lecturer	23101
23102	Polytechnic lecturer	23102
23103	Teaching assistant/Tutor in universities	23109 (part)
23109	Other university, polytechnic and higher education teachers	23109 (part)
232	JUNIOR COLLEGE AND PRE-UNIVERSITY EDUCATION TEACHERS	
2320	<u>Junior College and Pre-university Education Teachers</u>	
23200	Junior college and pre-university teacher (including integrated programme year 5-6 teacher)	23300 (part)
233	VOCATIONAL EDUCATION TEACHERS AND TRAINERS	
2330	<u>Vocational Education Teachers and Trainers</u>	
23300	Technical/Vocational/Commercial education institute teacher and trainer	23200
234	SECONDARY EDUCATION TEACHERS	
2340	<u>Secondary Education Teachers</u>	
23400	Secondary school teacher (including integrated programme year 1-4 teacher)	23300 (part)
235	PRIMARY EDUCATION TEACHERS	
2350	<u>Primary School Teachers</u>	
23500	Primary school teacher	23400
236	OTHER TEACHING PROFESSIONALS	
2361	<u>Education Methods Specialists</u>	
23611	Education methods adviser	23511
23612	Teaching aid specialist (including audio-visual aid specialist)	23512
23619	Other education methods specialists	23519

SSOC 2015	OCCUPATION	SSOC 2010
2362	<u>Special Education Teachers</u>	
23621	Teacher of the blind	23521
23622	Teacher of the deaf	23522
23623	Teacher of the mentally handicapped	23523
23624	Special education teachers for infants and children (eg Early Intervention Programme for Infants and Children teachers)	23529 (part)
23629	Other special education teachers	23529 (part)
2369	<u>Other Teaching Professionals Not Elsewhere Classified</u>	
23690	Other teaching professionals n.e.c.	23590
<b>24</b>	<b>BUSINESS AND ADMINISTRATION PROFESSIONALS</b>	
241	FINANCE PROFESSIONALS	
2411	<u>Accountants</u>	
24111	Accountant (excluding tax accountant)	24111 (part)
24112	Auditor (accounting)	24112
24113	Tax accountant	24111 (part)
2412	<u>Financial and Investment Advisers</u>	
24120	Financial/Investment adviser (eg relationship manager)	24120
2413	<u>Financial Analysts and Related Professionals</u>	
24131	Financial analyst (eg equities analyst, credit analyst, investment research analyst)	24131
24132	Compliance officer/Risk analyst (financial)	24132
24133	Fund/Portfolio manager (including asset allocator)	24133
24134	Treasury manager	24134
24139	Other financial analysts and related professionals (eg financial product structurer/product controller)	24139
2414	<u>Securities and Finance Dealers and Brokers</u>	
24141	Securities and finance dealer/broker	33111
24142	Foreign exchange dealer/broker	33112
24143	Financial derivatives dealer/broker	33113
24144	Commodities derivatives broker	33114
24149	Other finance dealers and brokers	33119
2415	<u>Insurance Underwriters</u>	
24150	Insurance underwriter	33212

SSOC 2015	OCCUPATION	SSOC 2010
242	ADMINISTRATION PROFESSIONALS	
2421	<u>Management and Business Consultants</u>	
24211	Management consultant	24211
24212	Business consultant	24212
2422	<u>Policy Administration Professionals</u>	
24220	Policy administration professional (eg policy analyst)	24220
2423	<u>Human Resource Professionals</u>	
24231	Human resource consultant (excluding executive search consultant)	24231
24232	Executive search consultant	24232
2429	<u>Other Administration Professionals Not Elsewhere Classified</u>	
24291	Research officer (non-statistical)	33492
24299	Other administration professionals n.e.c.	new item
243	MARKETING AND PUBLIC RELATIONS PROFESSIONALS	
2431	<u>Advertising and Marketing Professionals</u>	
24311	Creative director (advertising)	24311
24312	Market research analyst	24312
2432	<u>Public Relations Professionals</u>	
24320	Public relations/Corporate communications professional	24320, 33450
2433	<u>Specialised Goods Sales Professionals</u>	
24331	Technical sales professionals	33222
24332	Medical and pharmaceutical products sales professionals	33223
24333	ICT sales professionals	33224
24334	Sales professionals (institutional sales of financial products)	33225
24339	Other specialised goods sales professionals	33229 (part)
2434	<u>Trade and Ship Brokers</u>	
24341	Trade broker (including oil and bunker trader)	33241
24342	Ship broker	33242
24343	Ship charterer	31593

SSOC 2015	OCCUPATION	SSOC 2010
<b>25</b>	<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY PROFESSIONALS</b>	
251	SOFTWARE AND APPLICATIONS DEVELOPERS AND ANALYSTS	
2511	<u>Systems Analysts</u>	
25111	Systems designer/analyst	25111
25112	IT business process consultant/business analyst	25112
25113	Enterprise/Solution architect	new item
2512	<u>Software, Web and Multimedia Developers</u>	
25121	Software developer	25121
25122	Web and mobile applications developer	25122
25123	Multimedia (including computer games) developer	25123
2514	<u>Applications and Systems Programmers</u>	
25140	Applications/Systems programmer	25140
2515	<u>Information Technology Testing and Quality Assurance Professionals</u>	
25151	Information technology testing/quality assurance specialist	25151
25152	Information technology auditor	25152
2516	<u>Information Technology Project Managers</u>	
25160	Information technology project manager	25160
2519	<u>Software and Applications Developers and Analysts Not Elsewhere Classified</u>	
25190	Software and applications developer and analyst n.e.c.	25190
252	DATABASE, NETWORK AND INFRASTRUCTURE PROFESSIONALS	
2521	<u>Database Designers and Administrators</u>	
25211	Database administrator	25211
25212	Database architect	25212
2522	<u>Network, Servers and Computer Systems Administrators</u>	
25220	Network, servers and computer systems administrator	25220
2523	<u>Computer Network and Infrastructure Professionals</u>	
25230	Network/Infrastructure architect, engineer and specialist	25230

SSOC 2015	OCCUPATION	SSOC 2010
2524 25240	<u>Information Technology Security Specialists</u> Information technology security specialist	25240
2529 25291 25299	<u>Database and Network Professionals Not Elsewhere Classified</u> Data scientist Database and network professional n.e.c.	25290 (part) 25290 (part)
<b>26</b>	<b>LEGAL, SOCIAL AND CULTURAL PROFESSIONALS</b>	
261	LEGAL PROFESSIONALS	
2611 26111 26112 26119	<u>Lawyers</u> Advocate/Solicitor (practising) In-house legal counsel (except judiciary, ministries and statutory boards) Other lawyers (eg prosecutors, legal counsel in ministries and statutory boards)	26111 26112 26113
2612 26120	<u>Judges</u> Judge (including registrar in judiciary)	26120
262	LIBRARIANS, ARCHIVISTS AND CURATORS	
2621 26211 26212 26213	<u>Archivists, Curators and Conservators</u> Archivist Curator (art gallery and museum) Conservator (art works)	26211 26212 26213
2622 26221 26229	<u>Librarians and Related Information Professionals</u> Librarian Other information professionals	26221 26229
263	SOCIAL SCIENCE PROFESSIONALS	
2631 26310	<u>Economists</u> Economist	26310
2632 26321 26322 26323	<u>Sociologists, Anthropologists and Related Professionals</u> Sociologist Anthropologist Social research analyst	26321 26322 26323

SSOC 2015	OCCUPATION	SSOC 2010
2633	<u>Historians, Political Scientists and Other Social Science Professionals</u>	
26331	Historian	26331
26332	Political scientist	26332
26339	Other social science professionals (eg philosopher)	26339
2634	<u>Psychologists</u>	
26340	Psychologist	26340
2635	<u>Social Work and Counselling Professionals</u>	
26351	Social worker (general)	26351
26352	Social worker (delinquency)	26352
26353	Medical social worker	26353
26354	Counsellor (rehabilitation)	26354
26355	Counsellor (drugs and alcohol)	26355
26356	Counsellor (family)	26356
26357	School counsellor	26357
26359	Other social work and counselling professionals	26359
264	AUTHORS, JOURNALISTS AND EDITORS	
2641	<u>Authors and Related Writers</u>	
26411	Author	26411
26412	Script writer	26412
26413	Advertising copywriter	26413
26414	Technical writer	26414
26415	Continuity and script editor	26415
26416	Book editor	26416
26419	Other authors and related writers	26419
2642	<u>Journalists</u>	
26421	Journalist	26421
26422	Editor (news and periodicals)	26422
2643	<u>Translators, Interpreters and Other Linguists</u>	
26431	Translator	39101
26432	Interpreter	39102
265	CREATIVE AND PERFORMING ARTISTS	
2651	<u>Visual Artists</u>	
26511	Sculptor	26511
26512	Painter	26512
26513	Cartoonist	26513
26519	Other visual artists	26519

SSOC 2015	OCCUPATION	SSOC 2010
2652	<u>Musicians, Composers and Singers</u>	
26521	Instrumentalist	26521
26522	Composer/Orchestrator	26522
26523	Conductor/Director of orchestra/band/choir	26523
26524	Singer	26524
26529	Other musicians, composers and singers	26529
2653	<u>Dancers and Choreographers</u>	
26531	Dancer	26531
26532	Choreographer	26532
2654	<u>Film, Stage and Related Directors and Producers</u>	
26541	Producer (stage, film, television, computer games, video and radio)	26541
26542	Director (stage, film, television and radio)	26542
26543	Artistic director (stage, film, television and radio)	26543
26544	Producer/Director of commercials	26544
26545	Editor (radio, television and video)	26545
26549	Other film, stage and related directors and producers	26549
2655	<u>Actors</u>	
26550	Actor	26550
2656	<u>Radio and Television Presenters and Related Professionals</u>	
26561	Radio presenter	34411
26562	Television presenter	34412
26563	Dubbing artiste	34413
26569	Other radio and television presenters and related professionals	34419 (part)
<b>29</b>	<b>OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>	
290	OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED	
2901	<u>Religious Professionals</u>	
29011	Minister of religion	29011
29019	Other religious professionals	29019
2909	<u>Other Professionals Not Elsewhere Classified</u>	
29090	Other professionals n.e.c. (eg patent agent, trademark agent, intellectual property strategist)	29090



SSOC 2015	OCCUPATION	SSOC 2010
<b>3</b>	<b><u>ASSOCIATE PROFESSIONALS AND TECHNICIANS</u></b>	
<b>31</b>	<b>PHYSICAL AND ENGINEERING SCIENCE ASSOCIATE PROFESSIONALS</b>	
310	ASSISTANT ENGINEERS	
3100	<u>Assistant Engineers</u>	
31001	Assistant civil and structural engineer	31001
31002	Assistant electrical engineer	31002
31003	Assistant electronics engineer	31003
31004	Assistant mechanical engineer	31004
31005	Assistant chemical engineer	31005
31006	Assistant manufacturing engineer	31006
31009	Other assistant engineers	31009
311	PHYSICAL AND ENGINEERING SCIENCE TECHNICIANS	
3111	<u>Chemical and Physical Science Technicians</u>	
31111	Chemistry technician	31111
31112	Physics technician	31112
31119	Other chemical and physical science technicians	31119
3112	<u>Civil Engineering Technicians</u>	
31121	Civil engineering technician	31121
31122	Structural engineering technician	31122
31123	Building technician	31123
31124	Land surveying technician	31124
31125	Resident technical officer	31125
31129	Other civil engineering and related technicians	31129
3113	<u>Electrical Engineering Technicians</u>	
31131	Electrical engineering technician (general)	31131
31132	Electrical engineering technician (high voltage)	31132
31139	Other electrical engineering technicians	31139
3114	<u>Electronics Engineering Technicians</u>	
31141	Electronics engineering technician (general)	31141
31142	Semi-conductor technician	31142
31143	Audio and video equipment technician	31143
31144	Instrumentation technician	31144
31149	Other electronics engineering technicians	31149

SSOC 2015	OCCUPATION	SSOC 2010
3115	<u>Mechanical Engineering Technicians</u>	
31151	Mechanical engineering technician (general)	31151
31152	Aeronautical engineering technician	31152
31153	Automotive engineering technician	31153
31154	Air-conditioning/Refrigeration engineering technician	31154
31155	Machining/Tooling technician	31155
31156	Tool/Mould designer	31156
31157	Marine surveyor (ship and nautical)	31157
31158	Airworthiness surveyor	31158
31159	Other mechanical engineering technicians	31159
3116	<u>Chemical Engineering Technicians</u>	
31161	Chemical engineering technician (general)	31161
31162	Chemical engineering technician (petroleum and natural gas)	31162
31163	Chemical engineering technician (petrochemicals)	31163
31169	Other chemical engineering technicians	31169
3117	<u>Manufacturing Engineering Technicians</u>	
31171	Manufacturing engineering technician (general)	31171
31172	Production engineering technician	31172
31173	Automation designer	31173
31174	Automation technician	31174
31175	Quality assurance technician	31175
31179	Other manufacturing engineering technicians	31179
3118	<u>Draughtsmen</u>	
31181	Draughtsman (general)	31181
31182	Mechanical draughtsman	31182
31183	Electrical/Electronics draughtsman	31183
31184	Civil/Structural engineering draughtsman	31184
31185	Architectural draughtsman	31185
31186	Marine draughtsman	31186
31189	Other draughtsmen (eg cartographical draughtsman)	31189
3119	<u>Physical and Engineering Science Technicians Not Elsewhere Classific</u>	
31191	Mechatronics technician	31191
31192	Refining/Smelting technician	31192
31193	Physical metallurgy technician	31193
31194	Petroleum and natural gas extraction technician	31194
31195	Electronic pre-press technician	31195
31196	Precision optics technician	31196
31197	Quantity surveying technician	31197
31199	Other physical and engineering science technicians n.e.c.	31199

SSOC 2015	OCCUPATION	SSOC 2010
314	LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS	
3141	<u>Life Science Technicians (Except Medical)</u>	
31411	Biological technician	31411
31412	Food science technician	31412
31413	Clinical research coordinator	new item
31419	Other life science technicians	31419
3142	<u>Agronomy, Horticultural and Farming Technicians</u>	
31421	Horticultural technician (including irrigation specialist)	31421
31422	Plant tissue culture technician	31422
31423	Farming technician (animal production)	31423
31429	Other agronomy, horticultural and farming related technicians	31429
315	SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS	
3151	<u>Ship Engineering Officers</u>	
31510	Marine engineering officer	31512
3152	<u>Ships' Deck Officers and Pilots</u>	
31521	Ship's navigating officer (including chief, second and third officer)	31522
31522	Ship pilot	31523
31529	Other ships' deck officers and pilots	31529
3154	<u>Air Traffic Controllers</u>	
31540	Air traffic controller	31540
3156	<u>Sea Traffic Controllers</u>	
31560	Sea traffic controller	31560
3157	<u>Transport Operations Supervisors</u>	
31571	Air transport service supervisor	31571
31572	MRT service supervisor	31572
31573	Road transport supervisor	31573
31574	Port/Shipping operations supervisor	31574
31579	Other transport operations supervisors	31579

SSOC 2015	OCCUPATION	SSOC 2010
3159	<u>Transport Controllers and Related Workers Not Elsewhere Classified</u>	
31591	Port master/Dockmaster	31591
31592	Port captain	31592
31593	Flight operations officer	31594
31594	Air cargo officer	31595
31595	Load-sheet officer (aircraft)	31596
31596	MRT operations officer	31597
31599	Other transport controllers and related workers n.e.c.	31599
316	<b>PREMISES AND PARKS OFFICERS</b>	
3160	<u>Premises and Parks Officers</u>	
31601	Premises and facilities maintenance officer	31601
31602	Landscape operations officer	31602
31603	Parks officer	31603
317	<b>BUILDING, QUALITY AND SAFETY INSPECTORS</b>	
3171	<u>Building and Fire Inspectors</u>	
31711	Fire and safety inspector	31711
31719	Other building and fire inspectors	31719
3172	<u>Quality and Safety Inspectors</u>	
31720	Safety inspector (vehicles, processes and products)	31720
<b>32</b>	<b>HEALTH ASSOCIATE PROFESSIONALS</b>	
321	<b>MEDICAL AND PHARMACEUTICAL TECHNICIANS</b>	
3211	<u>Medical Imaging and Therapeutic Equipment Technicians</u>	
32111	Sonographer	32113
32112	Medical X-ray technician	32114
32119	Other medical imaging, therapeutic equipment technicians and related associate professionals	32119
3212	<u>Medical and Pathology Laboratory Technicians</u>	
32120	Medical and pathology laboratory technician	32120
3213	<u>Pharmacy Technicians</u>	
32130	Pharmacy technician	32130

SSOC 2015	OCCUPATION	SSOC 2010
3214	<u>Medical and Dental Prosthetic Technicians</u>	
32141	Prosthetist/Orthopaedic technician	32141
32142	Orthotist/Orthopaedic appliance maker and repairer	32142
32143	Dental technician	32143
322	NURSING ASSOCIATE PROFESSIONALS	
3220	<u>Nursing Associate Professionals</u>	
32200	Enrolled/Assistant nurse (excluding registered nurse)	32202
323	TRADITIONAL AND COMPLEMENTARY MEDICINE ASSOCIATE PROFESSIONALS	
3230	<u>Traditional and Complementary Medicine Associate Professionals</u>	
32300	Traditional and complementary medicine associate professional (eg homeopath and naturopath)	32300
324	VETERINARY TECHNICIANS AND ASSISTANTS	
3240	<u>Veterinary Technicians and Assistants</u>	
32400	Veterinary technician/assistant	32400
325	OTHER HEALTH ASSOCIATE PROFESSIONALS	
3251	<u>Dental Assistants and Therapists</u>	
32511	Dental assistant	32511
32512	Oral health therapist (eg dental therapists and dental hygienists)	32512
3253	<u>Community Health Workers</u>	
32530	Community health worker	32595
3254	<u>Opticians</u>	
32540	Optician	32542
3255	<u>Physiotherapy Technicians and Related Associate Professionals</u>	
32551	Massage therapist	32552
32559	Other physiotherapy technicians and related associated professionals	32559 (part)

SSOC 2015	OCCUPATION	SSOC 2010
3257	<u>Environmental and Occupational Health Inspectors</u>	
32571	Environmental inspector (environmental public health)	32571
32572	Occupational health inspector	32572
3259	<u>Health Associate Professionals Not Elsewhere Classified</u>	
32591	Paramedic	32594
32599	Other health associate professionals n.e.c.	32599
<b>33</b>	<b>BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS</b>	
331	FINANCIAL AND MATHEMATICAL ASSOCIATE PROFESSIONALS	
3312	<u>Credit and Loans Officers</u>	
33120	Credit and loans officer	33120
3313	<u>Accounting Associate Professionals</u>	
33130	Accounting associate professional (eg assistant accountant, audit (accounting) executive)	33130
3315	<u>Valuers and Loss Assessors</u>	
33151	Appraiser/Valuer (excluding intangible asset valuer)	33151 (part)
33152	Assessor	33152
33153	Intangible asset valuer (eg Intellectual property valuation analyst)	33151 (part)
332	SALES AND RELATED ASSOCIATE PROFESSIONALS	
3321	<u>Insurance Representatives and Related Associate Professionals</u>	
33211	Insurance sales agent/broker (including independent financial planner)	33211
33219	Other insurance representatives and related associate professionals	33219
3322	<u>Commercial and Marketing Sales Executives</u>	
33221	Business development executive	33221
33222	After sales adviser/Client account service executive	33226
33223	Marketing and sales executive (food & beverage services)	33229 (part)
33229	Other commercial and marketing sales executives	33229 (part)
3323	<u>Buyers and Purchasing Agents</u>	
33231	Buyer	33231
33232	Purchasing agent	33232

SSOC 2015	OCCUPATION	SSOC 2010
3329	<u>Sales and Related Associate Professionals Not Elsewhere Classified</u>	
33291	Intellectual property brokers and transaction specialists	new item
33299	Sales and related associate professional n.e.c.	33290
333	<b>BUSINESS SERVICES AGENTS</b>	
3331	<u>Shipping, Clearing and Forwarding Agents</u>	
33311	Clearing and forwarding agent	33311
33312	Ship agent	33312
3332	<u>Conference and Event Planners</u>	
33320	Exhibition/Conference/Event planner (including wedding planner/coordinator)	33320
3333	<u>Employment Agents and Labour Contractors</u>	
33330	Employment agent/Labour contractor	33330
3334	<u>Real Estate Agents</u>	
33340	Real estate agent	33340
3339	<u>Business Services Agents Not Elsewhere Classified</u>	
33391	Auctioneer	33391
33392	Advertising salesman	33392
33393	International market agent/representative (eg junket operator)	new item
33399	Other business services agents n.e.c. (eg sports agent, artiste agent)	33399
334	<b>ADMINISTRATIVE ASSOCIATE PROFESSIONALS</b>	
3345	<u>Human Resource Associate Professionals</u>	
33451	Personnel/Human resource officer	33461
33452	Industrial relations officer	33462
33453	Training officer	33463
33454	Crewing executive (ship)	33464
3349	<u>Administrative and Related Associate Professionals Not Elsewhere Classified</u>	
33491	Management executive	33491
33492	Operations officer (except transport operations)	33493
33499	Other administrative and related associate professionals n.e.c. (eg career consultant/advisor/coach)	33499

SSOC 2015	OCCUPATION	SSOC 2010
335	GOVERNMENT ASSOCIATE PROFESSIONALS	
3351	<u>Customs and Immigration Officers</u>	
33510	Customs/Immigration officer	33510
3355	<u>Police Inspectors</u>	
33550	Police inspector	33550
3359	<u>Government Associate Professionals Not Elsewhere Classified</u>	
33591	Government tax and excise official	33591
33592	Government social benefits official	33592
33593	Government licensing official	33593
33599	Other government associate professionals n.e.c.	33599
<b>34</b>	<b>LEGAL, SOCIAL, CULTURAL AND RELATED ASSOCIATE PROFESSIONALS</b>	
341	LEGAL AND SOCIAL ASSOCIATE PROFESSIONALS	
3411	<u>Legal Associate Professionals</u>	
34110	Legal associate professional (eg paralegal)	34110
3412	<u>Social Work Associate Professionals</u>	
34121	Youth worker	34121
34129	Other social work associate professionals	34129
342	SPORTS AND FITNESS WORKERS	
3421	<u>Athletes and Sportsmen</u>	
34210	Athlete/Sportsman	34210
3422	<u>Sports Coaches, Instructors, Officials and Other Related Associate Professionals</u>	
34221	Sports coach	34221
34222	Martial arts instructor	34222
34223	Physical fitness instructor (including yoga instructor and aerobics instructor)	34223
34224	Sports official	34224
34229	Other related instructors and associate professionals (eg adventure training instructor and scuba diving instructor)	34229



SSOC 2015	OCCUPATION	SSOC 2010
343	<b>ARTISTIC AND CULTURAL ASSOCIATE PROFESSIONALS</b>	
3431	<u>Photographers</u>	
34310	Photographer	34310
3432	<u>Interior Designers and Decorators</u>	
34321	Interior designer	34321
34322	Landscape designer	34322
34323	Display artist	34323
34324	Decorator and related worker (eg window dresser and set designer)	34324
3433	<u>Gallery, Museum and Library Technicians</u>	
34331	Library officer	34331
34332	Gallery, museum and related technician	34332
3434	<u>Chefs</u>	
34340	Chef	51201
3439	<u>Artistic and Cultural Associate Professionals Not Elsewhere Classified</u>	
34391	Tattooist	34392
34399	Other artistic and cultural associate professionals n.e.c.	34399
344	<b>CREATIVE AND PERFORMING ARTS ASSOCIATE PROFESSIONALS</b>	
3440	<u>Creative and Performing Arts Associate Professionals</u>	
34401	Clown	34421
34402	Magician	34422
34403	Acrobat	34423
34404	Aerialist	34424
34405	Disc jockey	34414
34409	Other creative and performing arts associate professionals	34419 (part), 34429
<b>35</b>	<b>INFORMATION AND COMMUNICATIONS TECHNICIANS</b>	
351	<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY OPERATORS AND TECHNICIANS</b>	
3511	<u>Computer Systems Operators</u>	
35110	Computer systems operator	35110

SSOC 2015	OCCUPATION	SSOC 2010
3512	<u>Computer Technicians</u>	
35120	Computer technician (including IT user helpdesk technician)	35120
3514	<u>Website Administrators</u>	
35140	Website administrator/Webmaster	35140
352	<b>TELECOMMUNICATIONS AND BROADCASTING TECHNICIANS AND AUDIO-VISUAL OPERATORS</b>	
3521	<u>Broadcasting Technicians and Audio-Visual Operators</u>	
35211	Broadcasting operations technician	35211
35212	Video camera operator	35212
35213	Television/Motion picture camera operator	35213
35214	Radio and television studio equipment operator	35214
35215	Sound recording equipment operator	35215
35216	Cinema projectionist	59001
35219	Other broadcasting technicians and audio-visual operators (eg microphone operator)	35219, 59009 (part)
3522	<u>Telecommunications Engineering Technicians</u>	
35220	Telecommunications technician	35220
3523	<u>Telecommunications Equipment Operators</u>	
35231	Telecommunications service supervisor	35231
35232	Radio-telephone operator (land-based)	35232
35233	Ship's radio officer	35233
35234	Flight radio operator	35234
35239	Other telecommunications equipment operators	35239
3529	<u>Optical and Electronic Equipment Operators Not Elsewhere Classified</u>	
35290	Optical and electronic equipment operator n.e.c.	35290
<b>36</b>	<b>TEACHING ASSOCIATE PROFESSIONALS</b>	
361	<b>PRE-PRIMARY EDUCATION TEACHERS</b>	
3610	<u>Pre-Primary Education Teachers</u>	
36100	Pre-primary education teacher	36100

SSOC 2015	OCCUPATION	SSOC 2010
362	EXTRACURRICULUM INSTRUCTORS	
3620	<u>Extracurriculum Instructors</u>	
36201	Language instructor (extracurriculum)	36201
36202	Art and craft instructor (extracurriculum)	36202
36203	Information technology trainer (extracurriculum)	36203
36204	Music instructor (extracurriculum)	36204
36205	Dance instructor (extracurriculum)	36205
36206	Speech and drama instructor (extracurriculum)	36206
36209	Other extracurriculum instructors	36209
369	TEACHING ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED	
3691	<u>Private Tutors</u>	
36910	Private tutor (academic)	36910
3699	<u>Teaching Associate Professionals Not Elsewhere Classified</u>	
36991	Relief teacher	36991
36999	Other teaching associate professionals n.e.c.	36999
<b>39</b>	<b>OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>	
399	OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED	
3991	<u>Religious Associate Professionals</u>	
39910	Non-ordained religious associate professional	39910
3999	<u>Other Associate Professionals Not Elsewhere Classified</u>	
39990	Other associate professionals n.e.c.	39990

SSOC 2015	OCCUPATION	SSOC 2010
<b>4</b>	<b><u>CLERICAL SUPPORT WORKERS</u></b>	
<b>40</b>	<b>CLERICAL SUPERVISORS</b>	
400	CLERICAL SUPERVISORS	
4000	<u>Clerical Supervisors</u>	
40000	Clerical supervisor	40000
<b>41</b>	<b>GENERAL AND KEYBOARD CLERKS</b>	
411	GENERAL OFFICE CLERKS	
4110	<u>General Office Clerks</u>	
41101	Office clerk (general)	41101
41102	Filing and copying clerk	41102
41103	Personnel/Human resource clerk	41103
41109	Other administrative clerks (eg public relations clerk)	41109
412	SECRETARIES AND VERBATIM REPORTERS	
4120	<u>Secretaries and Verbatim Reporters</u>	
41201	Secretary	41201
41202	Verbatim reporter	41202
413	KEYBOARD OPERATORS	
4131	<u>Typists and Word Processing Operators</u>	
41311	Stenographer	41311
41312	Typist	41312
41319	Other word processors and related operators	41319
4132	<u>Data Entry Clerks</u>	
41320	Data entry clerk	41320

SSOC 2015	OCCUPATION	SSOC 2010
<b>42</b>	<b>CUSTOMER SERVICES OFFICERS AND CLERKS</b>	
421	TELLERS, MONEY COLLECTORS AND RELATED CLERKS	
4211	<u>Bank Tellers and Other Counter Clerks</u>	
42111	Bank teller	42111
42112	Postal service counter clerk	42112
42113	Money changer	42113
42119	Other tellers and counter clerks	42119
4213	<u>Pawnbrokers and Moneylenders</u>	
42131	Pawnbroker	42131
42132	Moneylender	42132
4214	<u>Bill Collectors and Related Workers</u>	
42141	Bill collector	42141
42149	Other bill collectors and related workers	42149
422	CLIENT INFORMATION CLERKS	
4221	<u>Travel Agency and Related Clerks</u>	
42210	Travel agency/service clerk	42210
4223	<u>Telephone Operators</u>	
42230	Telephone operator	42230
4224	<u>Receptionists, Customer Service and Information Clerks</u>	
42241	Receptionist (general)	42241
42242	Hotel receptionist	42242
42243	Medical/Dental receptionist	42243
42244	Airport receptionist/clerk	42244
42245	Customer service officer/clerk	42245
42246	Contact centre information clerk	42246
42249	Other receptionists and information clerks	42249
4229	<u>Client Information Clerks Not Elsewhere Classified</u>	
42290	Client information clerk n.e.c.	42290

SSOC 2015	OCCUPATION	SSOC 2010
<b>43</b>	<b>NUMERICAL AND MATERIAL-RECORDING CLERKS</b>	
431	NUMERICAL CLERKS	
4311	<u>Accounting and Bookkeeping Clerks</u>	
43111	Bookkeeper	43111
43112	Ledger and accounts clerk	43112
43113	Audit clerk	43113
43114	Payroll/Wages clerk	43114
43115	Billing clerk	43115
43116	Purchasing clerk	43116
43119	Other accounting clerks (eg cost clerk)	43119
4312	<u>Finance and Insurance Clerks</u>	
43121	Bank operations clerk	43121
43122	Insurance/Underwriting clerk	43122
43123	Securities clerk	43123
43129	Other finance and insurance clerks (eg credit clerk)	43129
4314	<u>Statistical Clerks</u>	
43141	Statistical clerk (general)	43141
43142	Enumerator/Market research interviewer	43142
43149	Other statistical clerks	43149
4315	<u>Computer Operations Clerks</u>	
43151	Data processing control clerk	43151
43159	Other computer operations clerks	43159
432	MATERIAL-RECORDING AND TRANSPORT CLERKS	
4321	<u>Stock Clerks</u>	
43211	Stock records clerk	43211
43212	Storekeeper	43212
43219	Other stock clerks	43219
4322	<u>Production Clerks</u>	
43221	Material planning clerk	43221
43222	Production planning clerk	43222
43229	Other production clerks	43229

Major Group 4: Clerical Support Workers

SSOC 2015	OCCUPATION	SSOC 2010
4323	<u>Transport Clerks</u>	
43231	Shipping clerk	43231
43232	Land transport clerk	43239 (part)
43233	Air transport clerk	43239 (part)
43239	Other transport clerks	43239 (part)
<b>44</b>	<b>OTHER CLERICAL SUPPORT WORKERS</b>	
441	OTHER CLERICAL SUPPORT WORKERS	
4411	<u>Library Clerks</u>	
44110	Library clerk	44110
4417	<u>Legal Clerks</u>	
44170	Legal clerk	44170
4419	<u>Clerical Support Workers Not Elsewhere Classified</u>	
44191	Proofreading clerk	44191
44199	Other clerical support workers n.e.c.	44199

SSOC 2015	OCCUPATION	SSOC 2010
<b>5</b>	<b><u>SERVICE AND SALES WORKERS</u></b>	
<b>51</b>	<b>PERSONAL SERVICE WORKERS</b>	
511	TRAVEL ATTENDANTS, CONDUCTORS AND GUIDES	
5111	<u>Travel Attendants and Stewards</u>	
51111	Chief steward (ship)	51111
51112	Cabin attendant/steward	51112
5112	<u>Transport Service Inspectors and Related Workers</u>	
51121	Rail station service assistant	51121
51122	Ticket inspector	51122
51129	Other transport service inspectors and related workers	51129
5113	<u>Tour and Other Guides</u>	
51131	Tour guide	51131
51132	Nature guide (including zoo, birdpark and aquarium)	51132
51133	Theme park guide	51133
51139	Other guides (eg museum, historical sites)	51139
512	COOKS	
5120	<u>Cooks</u>	
51200	Cook	51202
513	WAITERS AND BARTENDERS	
5131	<u>Waiters</u>	
51311	Captain waiter/Waiter supervisor	51311
51312	Waiter	51312
5132	<u>Bartenders and Baristas</u>	
51321	Bartender/Mixologist	51320 (part)
51322	Barista	51320 (part)
5133	<u>Bar/Lounge Hostesses</u>	
51330	Bar/Lounge hostess	51330
5139	<u>Waiters and Bartenders Not Elsewhere Classified</u>	
51390	Waiter and bartender n.e.c. (eg food checker (catering services))	51390



SSOC 2015	OCCUPATION	SSOC 2010
514	HAIRDRESSERS, BEAUTICIANS AND RELATED WORKERS	
5141	<u>Hairdressers, Barbers and Other Related Workers</u>	
51411	Hair stylist/Hairdresser	51411
51412	Barber	51412
51419	Other hair care workers (eg hair therapist/consultant)	51419
5142	<u>Beauticians and Related Workers</u>	
51421	Beautician	51421
51422	Manicurist	51422
51423	Make-up artist (stage, film and studio)	51423
5149	<u>Wellness Related Workers Not Elsewhere Classified</u>	
51491	Masseur (non-medical) (including foot reflexologist)	51491
51492	Slimming consultant	51492
51499	Other wellness related workers n.e.c.	51499
515	HOUSEKEEPERS AND RELATED WORKERS	
5150	<u>Housekeepers and Related Workers</u>	
51501	Housekeeper (hotels and other establishments)	51501
51502	House steward	51502
51503	Housekeeping matron	51503
51509	Other housekeepers and related workers (eg personal butler)	51509
516	MAIL CARRIERS AND SORTING WORKERS	
5160	<u>Mail Carriers and Sorting Workers</u>	
51601	Postal/Courier service supervisor	51601
51602	Postman	51602
51603	Process server	51603
51604	Despatch worker	51604
51609	Other mail distribution workers (eg mail sorter)	51609
517	BOOKMAKERS, CROUPIERS AND RELATED GAMING WORKERS	
5170	<u>Bookmakers, Croupiers and Related Gaming Workers</u>	
51701	Gaming supervisor (eg pit manager/supervisor, slot manager/supervisor and casino shift manager/supervisor)	51701
51702	Bookmaker/Croupier/Casino dealer and related gaming worker	51702

SSOC 2015	OCCUPATION	SSOC 2010
519	PERSONAL SERVICE WORKERS NOT ELSEWHERE CLASSIFIED	
5191	<u>Astrologers, Fortune-tellers and Related Workers</u>	
51910	Astrologer/Fortune teller and related worker	51910
5193	<u>Undertakers and Embalmers</u>	
51931	Undertaker	51931
51932	Embalmer	51932
5194	<u>Pet Groomers, Animal Keepers and Trainers</u>	
51941	Pet groomer	51941
51942	Keeper/Trainer in zoological, bird and aquatic parks	51942
51943	Keeper/Trainer in crocodile farm	51943
51944	Horse trainer	51944
51945	Dog trainer	51945
51949	Other animal/bird keepers and animal care workers	51949
5195	<u>Driving Instructors</u>	
51950	Driving instructor/tester	51950
5199	<u>Personal Service Workers Not Elsewhere Classified</u>	
51991	Social escort	51991
51999	Other personal service workers n.e.c.	51999
<b>52</b>	<b>SALES WORKERS</b>	
521	STALL SALES WORKERS	
5211	<u>Hawker/Stall Holders (Excluding Prepared Food Or Drinks)</u>	
52110	Hawker/Stall holder (excluding prepared food or drinks)	52110
5212	<u>Hawker/Stall Holders (Prepared Food Or Drinks)</u>	
52120	Hawker/Stall holder (prepared food or drinks)	52120
5213	<u>Newsvendors</u>	
52130	Newsvendor	52130
5219	<u>Other Stall Sales Workers</u>	
52190	Other stall sales workers	52190

SSOC 2015	OCCUPATION	SSOC 2010
<b>522</b>	<b>SHOP SALESPERSONS</b>	
5220	<u>Shop and Store Salespersons</u>	
52201	Sales supervisor	52201
52202	Shop sales assistant	52202
<b>523</b>	<b>CASHIERS AND TICKET CLERKS</b>	
5230	<u>Cashiers and Ticket Clerks</u>	
52301	Cage/Count supervisor	52301
52302	Cashier (general)	52302
52303	Office cashier	52303
52309	Other cashiers, ticket and related clerks	52309
<b>524</b>	<b>MODELS, SALES DEMONSTRATORS AND OTHER SALES WORKERS</b>	
5241	<u>Fashion and Other Models</u>	
52411	Fashion model	52411
52419	Other models (eg artist's model)	52419
5242	<u>Sales Demonstrators and Door-to-Door Salespersons</u>	
52421	Sales demonstrator	52421
52422	Salesperson (door-to-door)	52422
5244	<u>Contact Centre Salespersons</u>	
52440	Telemarketer	52440
5249	<u>Sales Workers Not Elsewhere Classified</u>	
52491	Petrol station attendant	52491
52492	Food service counter attendant	52492
52499	Sales worker n.e.c. (eg ship chandler)	52499
<b>53</b>	<b>PERSONAL CARE WORKERS</b>	
<b>531</b>	<b>CHILD CARE WORKERS AND TEACHERS' AIDES</b>	
5311	<u>Child Care and Related Workers</u>	
53111	Babysitter (household)	53111
53112	Confinement nanny	53112
53113	Child /After school care centre worker	53113
53114	Child/Youth residential care assistant	53114

SSOC 2015	OCCUPATION	SSOC 2010
5312 53120	<u>Teachers' Aides</u> Teachers' aide	53120
532	HEALTHCARE ASSISTANTS AND OTHER PERSONAL CARE WORKERS	
5320 53201 53209	<u>Healthcare Assistants and Other Personal Care Workers</u> Healthcare assistant (eg therapy aide/assistant) Other personal care worker (eg old folks home)	53201 53209
<b>54</b>	<b>PROTECTIVE SERVICES WORKERS</b>	
541	PROTECTIVE SERVICES WORKERS	
5411 54110	<u>Fire-Fighting and Rescue Officers</u> Fire-fighting and rescue officer	54110
5412 54121 54122 54123	<u>Police Officers</u> Police officer Narcotics officer Auxiliary police officer	54121 54122 54123
5413 54130	<u>Prison Officers</u> Prison officer	54130
5414 54141 54142	<u>Security Guards</u> Security supervisor Private security officer	54140 (part) 54140 (part)
5415 54150	<u>Lifeguards</u> Lifeguard	54150
5419 54191 54192 54193 54194 54199	<u>Protective Services and Related Workers Not Elsewhere Classified</u> Private investigator Industrial investigator Insurance investigator Park ranger Other protective services and related workers n.e.c.	54191 54192 54193 54194 54199

---

SSOC 2015	OCCUPATION	SSOC 2010
<b>59</b>	<b>SERVICE WORKERS NOT ELSEWHERE CLASSIFIED</b>	
590	SERVICE WORKERS NOT ELSEWHERE CLASSIFIED	
5900	<u>Service Workers Not Elsewhere Classified</u>	
59000	Service workers n.e.c.	59009 (part)

---

SSOC 2015	OCCUPATION	SSOC 2010
<b>6</b>	<b><u>AGRICULTURAL AND FISHERY WORKERS</u></b>	
<b>61</b>	<b>AGRICULTURAL WORKERS</b>	
611	MARKET GARDENERS AND CROP GROWERS	
6111	<u>Vegetable Farm Workers</u>	
61111	Hydroponics farm worker	61111
61112	Mushroom farm worker	61112
61119	Other vegetable farm workers	61119
6113	<u>Gardeners, Horticultural and Nursery Farm Workers</u>	
61131	Flower/Orchid farm worker	61131
61132	Nursery worker (eg nursery technician)	61132 (part)
61133	Gardeners and horticultural workers (eg landscape technician)	61139 (part)
61134	Nursery supervisor	61132 (part)
61139	Other horticultural and nursery farm workers	61139 (part)
612	ANIMAL PRODUCERS	
6121	<u>Livestock and Dairy Farm Workers</u>	
61210	Livestock/Dairy farm worker	61210
6122	<u>Poultry Farm Workers</u>	
61221	Poultry farm worker (general)	61221
61222	Poultry hatchery worker	61222
61223	Poultry inseminator	61223
61229	Other poultry farm workers (eg poultry vaccinator)	61229
619	AGRICULTURAL WORKERS NOT ELSEWHERE CLASSIFIED	
6190	<u>Agricultural Workers Not Elsewhere Classified</u>	
61900	Agricultural worker n.e.c.	61900

SSOC 2015	OCCUPATION	SSOC 2010
<b>62</b>	<b>FISHERY WORKERS</b>	
622	FISHERY WORKERS	
6221	<u>Aquaculture Workers</u>	
62211	Fish/Prawn farm worker	62211
62212	Aquarium fish farm worker	62212
62213	Crocodile farm worker	62213
62219	Other aquatic life cultivation workers (eg oyster farm worker)	62219
6222	<u>Coastal Waters and Deep Sea Fishery Workers</u>	
62220	Coastal waters/Deep sea fishery worker	62220

SSOC 2015	OCCUPATION	SSOC 2010
<b>7</b>	<b><u>CRAFTSMEN AND RELATED TRADES WORKERS</u></b>	
<b>71</b>	<b>BUILDING AND RELATED TRADES WORKERS, EXCLUDING ELECTRICIANS</b>	
710	SUPERVISORS AND GENERAL FOREMEN (BUILDING AND RELATED TRADES)	
7100	<u>Supervisors and General Foremen (Building and Related Trades)</u>	
71000	Supervisor/General foreman (building and related trades)	71000
711	BUILDING FRAME AND RELATED TRADES WORKERS	
7112	<u>Bricklayers and Related Workers</u>	
71120	Bricklayer/Blocklayer	71120
7113	<u>Stone Cutters, Splitters, Carvers and Stonemasons</u>	
71131	Stone cutter/Carver	71131
71132	Stonemason	71132
7114	<u>Concrete Placers, Concrete Finishers and Related Workers</u>	
71141	Reinforced concreter (general)	71141
71142	Concrete form worker	71142
71143	Cement finisher/Screeder	71143
71144	Cementer (petroleum and gas wells)	71144
71149	Other concrete placers, concrete finishers and related workers	71149
7115	<u>Carpenters and Joiners</u>	
71151	Carpenter	71151
71152	Joiner	71152
7119	<u>Building Frame and Related Trades Workers Not Elsewhere Classified</u>	
71191	Scaffolder	71191
71192	Demolition worker	71192
71193	Cladding/Curtain wall erector	71193
71199	Other building frame and related trades workers n.e.c. (eg steeplejack)	71199



SSOC 2015	OCCUPATION	SSOC 2010
712	<b>BUILDING FINISHERS AND RELATED TRADES WORKERS</b>	
7121	<u>Roofers</u>	
71210	Roofer	71210
7122	<u>Floor Layers and Tile Setters</u>	
71220	Floor/Wall tiler	71220
7123	<u>Plasterers</u>	
71230	Plasterer	71230
7124	<u>Insulation Workers</u>	
71241	Building insulator	71241
71242	Boiler/Pipe insulator	71242
71243	Refrigeration/Air-conditioning equipment insulator	71243
71244	Refractory worker	71244
71249	Other insulation workers	71249
7125	<u>Glaziers</u>	
71250	Glazier	71250
7126	<u>Plumbers, Pipe Fitters and Related Workers</u>	
71261	Plumber	71261
71262	Pipe fitter	71262
71263	Pipe/Drain layer	71263
7127	<u>Air-Conditioning and Refrigeration Mechanics</u>	
71271	Air-conditioning/Refrigeration equipment mechanics	71271
71272	Air-conditioning/Refrigeration plant installer	71272
7129	<u>Building Finishers and Related Trades Workers Not Elsewhere Classified</u>	
71290	Building finisher and related trades worker n.e.c.	71290
713	<b>PAINTERS, BUILDING STRUCTURE CLEANERS AND RELATED WORKERS</b>	
7131	<u>Building Painters and Related Workers</u>	
71311	Building painter	71311
71312	Wall/Ceiling paperhanger	71312

SSOC 2015	OCCUPATION	SSOC 2010
7132	<u>Spray Painters, Varnishers and Other Painters</u>	
71321	Structural steel/Ship painter	71321
71322	Motor vehicle spray painter	71322
71323	Sign painter	71323
71324	Spray painter (except ships, motor vehicles and signs)	71324
71329	Other painters and related workers	71329
7133	<u>Building Maintenance Workers, Building Structure Cleaners and Related Workers</u>	
71331	Building maintenance worker	71331
71332	Building structure cleaner and related worker	71332
<b>72</b>	<b>METAL, MACHINERY AND RELATED TRADES WORKERS</b>	
720	SUPERVISORS AND GENERAL FOREMEN (METAL, MACHINERY AND RELATED TRADES)	
7200	<u>Supervisors and General Foremen (Metal, Machinery and Related Trades)</u>	
72000	Supervisor/General foreman (metal, machinery and related trades)	72000
721	SHEET AND STRUCTURAL METAL WORKERS, MOULDERS AND WELDERS AND RELATED TRADES WORKERS	
7211	<u>Metal Moulders and Coremakers</u>	
72111	Metal moulder	72111
72112	Coremaker	72112
7212	<u>Welders and Flame Cutters</u>	
72121	Welder	72121
72122	Flame cutter	72122
7213	<u>Sheet Metal Workers</u>	
72131	Sheet metal worker (general)	72131
72132	Boilermaker	72132
72133	Panel beater	72133
72139	Other sheet metal workers	72139

SSOC 2015	OCCUPATION	SSOC 2010
7214	<u>Structural Metal Preparers and Erectors</u>	
72141	Structural steel worker (workshop)/fabricator	72141
72142	Reinforcing iron worker/Steel reinforcement worker	72142
72143	Structural steel erector	72143
72144	Metal shipwright	72144
72145	Ship plater	72145
72146	Mould lofter	72146
72149	Other structural metal preparers and erectors	72149
7215	<u>Riggers and Cable Splicers</u>	
72151	Hoisting equipment rigger (general)	72151
72152	Rope and cable splicer (general)	72152
72153	Hoisting equipment rigger (construction)	72153
72154	Ship rigger	72154
72155	Oil and gas well drilling rigger	72156
72159	Other riggers and cable splicers	72159
722	<b>BLACKSMITHS, TOOLMAKERS AND RELATED TRADES WORKERS</b>	
7221	<u>Blacksmiths, Hammersmiths and Forging-Press Workers</u>	
72211	Blacksmith (general)	72211
72212	Forging-press operator	72212
72219	Other blacksmiths, hammersmiths and forging-press workers	72219
7222	<u>Toolmakers and Related Workers</u>	
72221	Tool and die maker	72221
72222	Jig and gauge maker	72222
72223	Metal pattern maker	72223
72224	Locksmith	72224
72229	Other toolmakers and related workers	72229
7224	<u>Metal Polishers, Wheel Grinders and Tool Sharpeners</u>	
72241	Buffing/Polishing machine operator	72241
72242	Tool grinder (machine tools)	72242
72249	Other metal polishers, grinders and tool sharpeners	72249
723	<b>MACHINERY MECHANICS, FITTERS AND REPAIRERS</b>	
7231	<u>Motor Vehicle Mechanics and Repairers</u>	
72311	Motor vehicle mechanic	72311
72312	Motor vehicle body builder	72312
7232	<u>Aircraft Engine Mechanics and Repairers</u>	
72321	Aircraft engine mechanic	72321
72322	Aircraft engine fitter	72322

SSOC 2015	OCCUPATION	SSOC 2010
7233	<u>Other Machinery Mechanics and Repairers</u>	
72331	Machinery mechanic (general)	72331
72332	Machinery fitter (general)	72332
72333	Industrial/Office machinery mechanic	72333
72334	Marine engine fitter	72334
72335	Machinery erector/installer	72335
72339	Other machinery mechanics and repairers (eg agricultural machinery mechanic, bicycle repairer)	72339
<b>73</b>	<b>PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES WORKERS</b>	
730	SUPERVISORS AND GENERAL FOREMEN (PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES)	
7300	<u>Supervisors and General Foremen (Precision, Handicraft, Printing and Related Trades)</u>	
73000	Supervisor/General foreman (precision, handicraft, printing and related trades)	73000
731	HANDICRAFT AND PRECISION WORKERS	
7311	<u>Precision Instrument Makers and Repairers</u>	
73111	Watch and clock assembler	73111
73112	Watch and clock repairer	73112
73113	Optical instrument maker/repairer	73113
73114	Medical device assembler/repairer	73119 (part)
73119	Other precision instrument makers and repairers	73119 (part)
7312	<u>Musical Instrument Makers, Repairers and Tuners</u>	
73120	Musical instrument maker/repairer/tuner	73120
7313	<u>Jewellery and Precious Metal Workers</u>	
73131	Jewellery worker (general)	73131
73132	Gem setter/cutter and polisher	73132
73133	Goldsmith/Silversmith	73133
73134	Jewellery engraver	73134
73139	Other jewellery and precious metal workers	73139
7314	<u>Potters and Related Workers</u>	
73141	Pottery worker	73141
73142	Brick and tile moulder	73142
73149	Other potters and related workers	73149

SSOC 2015	OCCUPATION	SSOC 2010
7315	<u>Glass Makers, Cutters, Grinders and Finishers</u>	
73151	Glass blower	73151
73152	Glass lens moulder	73152
73153	Optical glass cutter	73153
73154	Lens grinding machine operator	73154
73155	Lens polishing machine operator	73155
73159	Other glass makers, cutters, grinders and finishers	73159
7316	<u>Sign Writers, Decorative Painters, Engravers and Etchers</u>	
73161	Glass engraver/etcher	73161
73162	Glass and ceramic painter/decorator	73162
73169	Other engravers and related decorative painters	73169
732	<b>PRINTING TRADES WORKERS</b>	
7321	<u>Pre-Press Trades Workers</u>	
73211	Compositor/Typesetter	73211
73212	Stereotyper	73212
73213	Electrotyper	73213
73214	Photo-engraver	73214
73215	Photogravure cameraman	73215
73216	Photogravure retoucher	73216
73217	Photogravure etcher	73217
73219	Other pre-press trades workers	73219
7322	<u>Printers</u>	
73221	Silk screen/Block/Textile printer	73221
73229	Other printers	73229
74	<b>ELECTRICAL AND ELECTRONIC TRADES WORKERS</b>	
740	<b>SUPERVISORS AND GENERAL FOREMEN (ELECTRICAL AND ELECTRONIC TRADES)</b>	
7400	<u>Supervisors and General Foremen (Electrical and Electronic Trades)</u>	
74000	Supervisor/General foreman (electrical and electronic trades)	74000
741	<b>ELECTRICAL EQUIPMENT RELATED TRADES WORKERS</b>	
7411	<u>Electricians</u>	
74110	Electrician	74110

SSOC 2015	OCCUPATION	SSOC 2010
7412	<u>Electrical Mechanics and Fitters</u>	
74121	Electrical fitter (general)	74121
74122	Electrical lift, escalator and related equipment fitter	74122
74123	Electrical household appliance repairer	74123
74129	Other electrical mechanics and fitters	74129
7413	<u>Electrical Line Installers and Repairers</u>	
74131	Electrical line installer	74131
74132	Electric cable jointer	74132
74139	Other electrical line installers and repairers	74139
742	<b>ELECTRONICS AND TELECOMMUNICATIONS RELATED TRADES WORKERS</b>	
7421	<u>Electronics Mechanics and Servicers</u>	
74211	Electronics fitter (general)	74211
74212	Consumer audio and video equipment mechanic	74212
74219	Other electronics fitters	74219
7422	<u>Information and Communications Technology Installers and Servicers</u>	
74221	Radio, television and radar broadcasting/transmitting equipment fitter	74221
74222	Computer and related electronic equipment mechanic	74222
74223	Telecommunications lineman	74223
74224	Telecommunications installer/servicer	74224
75	<b>FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND OTHER CRAFT AND RELATED TRADES WORKERS</b>	
750	<b>SUPERVISORS AND GENERAL FOREMEN (FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND RELATED TRADES)</b>	
7500	<u>Supervisors and General Foremen (Food Processing, Woodworking, Garment, Leather and Related Trades)</u>	
75000	Supervisor/General foreman (food processing, woodworking, garment, leather and related trades)	75000
751	<b>FOOD PROCESSING AND RELATED TRADES WORKERS</b>	
7511	<u>Meat and Fish Preparers</u>	
75111	Slaughterer	75111
75119	Other meat and fish preparers	75119

SSOC 2015	OCCUPATION	SSOC 2010
7512	<u>Bakers, Pastry and Confectionery Makers</u>	
75121	Baker (general)	75121
75122	Bread baker	75122
75123	Pastry and confectionery maker	75123
7515	<u>Food and Beverage Tasters and Graders</u>	
75151	Coffee and tea taster	75151
75159	Other food and beverage tasters and graders	75159
7519	<u>Food Processing and Related Trades Workers Not Elsewhere Classified</u>	
75190	Food processing and related trades worker n.e.c. (eg fruit pickler)	75190
752	WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS	
7521	<u>Wood Treaters</u>	
75211	Kiln drier	75211
75212	Wood-treating worker	75212
75219	Other wood treaters	75219
7522	<u>Cabinet Makers and Wood Related Trades Workers</u>	
75221	Cabinet and furniture maker	75221
75222	Wood furniture finisher	75222
75223	Picture frame maker	75223
75229	Other cabinet makers and wood related trades workers	75229
7529	<u>Furniture Makers and Related Trades Workers Not Elsewhere Classified</u>	
75291	Rattan furniture maker	75291
75299	Other furniture makers and related trades workers n.e.c.	75299
753	GARMENT, LEATHER AND RELATED TRADES WORKERS	
7531	<u>Tailors/Dressmakers</u>	
75310	Tailor/Dressmaker	75310
7532	<u>Garment and Related Pattern-Makers and Cutters</u>	
75321	Garment cutter	75321
75322	Garment pattern-maker	75322
75323	Garment marker	75323
75329	Other garment and related pattern-makers and cutters	75329

Major Group 7: Craftsmen and Related Trades Workers

SSOC 2015	OCCUPATION	SSOC 2010
7534	<u>Upholsterers and Related Workers</u>	
75341	Furniture upholsterer	75341
75342	Vehicle upholsterer	75342
75343	Mattress maker	75343
75349	Other upholsterers and related workers	75349
7536	<u>Shoemakers and Related Workers</u>	
75361	Shoemaker	75361
75362	Orthopaedic footwear maker	75362
75363	Cobbler	75363
75364	Leather goods maker/assembler	75364
75369	Other shoemakers and related workers	75369
7539	<u>Garment and Related Trades Workers Not Elsewhere Classified</u>	
75390	Garment and related trades worker n.e.c. (eg fellmonger, tent sewer, umbrella maker)	75390
754	OTHER CRAFT AND RELATED WORKERS	
7540	<u>Other Craft and Related Workers</u>	
75401	Fumigators/Pest and weed controllers	75401
75402	Underwater diver	75402
75409	Other craft and related workers n.e.c.	75409



SSOC 2015	OCCUPATION	SSOC 2010
<b>8</b>	<b><u>PLANT AND MACHINE OPERATORS AND ASSEMBLERS</u></b>	
<b>81</b>	<b>STATIONARY PLANT AND MACHINE OPERATORS</b>	
810	STATIONARY PLANT AND MACHINE SUPERVISORS AND GENERAL FOREMEN	
8100	<u>Stationary Plant and Machine Supervisors and General Foremen</u>	
81000	Stationary plant and machine supervisor/general foreman	81000
811	MINING AND MINERAL PROCESSING PLANT OPERATORS	
8113	<u>Well Drillers and Borers and Other Mining Related Workers</u>	
81131	Well driller (petroleum and gas wells)	81131
81132	Well driller/borer (except oil and gas wells)	81132
81133	Deep-boring machine operator	81133
81139	Other well drillers and borers and other mining related workers	81139
8114	<u>Cement and Other Mineral Products Machine Operators</u>	
81141	Precast concrete product making machine operator	81141
81142	Asbestos cement product making machine operator	81142
81143	Terrazzo tile making machine operator	81143
81144	Concrete mixing plant operator (including concrete mixer operator)	81144
81145	Concrete pump operator	81145
81149	Other mineral products and processing machine operators	81149
812	METAL PROCESSING, FINISHING AND PRODUCTS PLANT OPERATORS	
8121	<u>Metal Melters, Casters and Rolling Mill Operators</u>	
81211	Ore and metal furnace operator (including furnaceman)	81211
81212	Centrifugal casting machine operator	81212
81213	Die casting machine operator	81213
81214	Continuous rod casting machine operator (non-ferrous metal)	81214
81215	Metal rolling mill worker	81215
81219	Other metal melters, casters and rolling mill operators	81219
8122	<u>Metal Heat Treating Plant Operators</u>	
81220	Metal heat treating plant operator	81220

SSOC 2015	OCCUPATION	SSOC 2010
8123	<u>Metal Drawers and Extruders</u>	
81231	Wire drawer	81231
81232	Seamless pipe and tube drawer	81232
81233	Extruder operator (metal)	81233
81239	Other metal drawers and extruders	81239
8124	<u>Metal Finishing, Plating and Coating Machine Operators</u>	
81241	Electro-plater	81241
81242	Hot-dip plater	81242
81243	Wire-coating machine operator	81243
81244	Galvaniser	81244
81245	Metal sprayer	81245
81246	Anodiser	81246
81247	Sandblaster/Shotblaster (metal)	81247
81248	Metal cleaner	81248
81249	Other metal finishing, plating and coating machine operators	81249
8125	<u>Machine-Tool Setter-Operators</u>	
81251	Metalworking machine setter-operator (general)	81251
81252	Lathe setter-operator	81252
81253	Milling machine setter-operator	81253
81254	Planing machine setter-operator	81254
81255	Boring/Drilling machine setter-operator	81255
81256	Shaping and honing machine setter-operator	81256
81257	Precision grinding machine setter-operator	81257
81258	Numerical control machine setter-operator	81258
81259	Other machine-tool setter-operators	81259
813	<b>CHEMICAL PROCESSING, CHEMICAL AND PHOTOGRAPHIC PRODUCTS PLANT AND MACHINE OPERATORS</b>	
8131	<u>Chemical Processing and Chemical Products Plant and Machine Operators</u>	
81311	Crushing/Grinding/Chemical mixing equipment operator	81311
81312	Chemical heat treating plant operator	81312
81313	Chemical filtering and separating equipment operator	81313
81314	Chemical still/reactor operator	81314
81315	Synthetic fibre making machine operator	81315
81319	Other chemical processing and chemical products plant and machine operators	81319
8132	<u>Photographic Products Machine Operators</u>	
81320	Photographic products machine operator	81320

SSOC 2015	OCCUPATION	SSOC 2010
8133	<u>Pharmaceutical and Toiletry Products Machine Operators</u>	
81331	Pharmaceutical products machine operator	81331
81332	Soap-making machine operator	81332
81339	Other toiletry products machine operators	81339
8139	<u>Chemical Processing, Chemical and Photographic Products Plant and Machine Operators Not Elsewhere Classified</u>	
81390	Chemical processing, chemical and photographic products plant and machine operator n.e.c.	81390
814	RUBBER, PLASTIC AND PAPER PRODUCTS MACHINE OPERATORS	
8141	<u>Rubber Products Machine Operators</u>	
81411	Rubber millman	81411
81412	Rubber laminating machine operator	81412
81419	Other rubber products machine operators	81419
8142	<u>Plastic Products Machine Operators</u>	
81420	Plastic products machine operator	81420
8143	<u>Paper and Paperboard Products Machine Operators</u>	
81431	Carton/Paper box making machine operator	81431
81432	Paper product making machine operator	81432
81439	Other paper and paperboard products machine operators	81439
815	TEXTILE, FUR AND LEATHER PRODUCTS MACHINE OPERATORS	
8151	<u>Fibre Preparing, Spinning and Winding Machine Operators</u>	
81511	Spinner (thread and yarn)	81511
81512	Winder (thread and yarn)	81512
8152	<u>Weaving and Knitting Machine Operators</u>	
81521	Weaving machine operator	81521
81522	Knitting machine operator	81522
8153	<u>Sewing Machine Operators</u>	
81531	Sewing machine operator	81531
81532	Machine embroiderer	81532

SSOC 2015	OCCUPATION	SSOC 2010
8154	<u>Bleaching, Dyeing and Fabric Cleaning Machine Operators</u>	
81541	Textile bleaching machine operator	81541
81542	Dyeing machine operator	81542
81543	Textile washing/Shrinking machine operator	81543
81549	Other bleaching, dyeing and fabric cleaning machine operators	81549
8159	<u>Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified</u>	
81591	Laundry and dry cleaning worker (machine, non-household)	81591
81599	Other textile, fur and leather products machine operators n.e.c. (eg shoemaking and related machine operators)	81599
816	FOOD AND RELATED PRODUCTS MACHINE OPERATORS	
8161	<u>Meat and Fish Products Machine Operators</u>	
81611	Sausage making machine operator	81611
81619	Other meat and fish processing machine operators	81619
8162	<u>Dairy and Confectionery Products Machine Operators</u>	
81621	Dairy product processing machine operator (general)	81621
81622	Dairy product pasteurising machine operator	81622
81623	Butter making machine operator	81623
81624	Ice-cream making machine operator	81624
81625	Chocolate making machine operator	81625
81626	Confectionery making machine operator	81626
81629	Other dairy and confectionery products machine operators	81629
8163	<u>Grain and Spice Milling Machine Operators</u>	
81630	Grain/Spice milling machine operator	81630
8164	<u>Baked and Cereal Products Machine Operators</u>	
81641	Biscuit making machine operator	81641
81642	Macaroni/Noodle/Vermicelli making machine operator	81642
81649	Other baked and cereal products machine operators	81649
8165	<u>Fruit, Vegetable and Nut Products Machine Operators</u>	
81651	Fruit-press operator	81651
81652	Oil pressman (edible oils)	81652
81653	Refining machine operator (oils and fats)	81653
81654	Hydrogenation operator (oils and fats)	81654
81655	Sauce making machine operator	81655
81659	Other fruit, vegetable and nut processing machine operators	81659
8166	<u>Sugar Processing and Refining Machine Operators</u>	
81660	Sugar processing and refining machine operator	81660

SSOC 2015	OCCUPATION	SSOC 2010
8167	<u>Brewers and Wine and Other Beverage Machine Operators</u>	
81671	Germination worker (malting)	81671
81672	Kilnman (malting)	81672
81673	Brewer	81673
81674	Fermenting-room man	81674
81675	Pasteuriser attendant (malt liquor)	81675
81676	Syrup making machine operator	81676
81677	Coffee/Tea blending machine operator	81677
81678	Coffee/Cocoa bean roasting and grinding machine operator	81678
81679	Other brewers and wine and other beverage machine operators	81679
8168	<u>Tobacco Products Machine Operators</u>	
81681	Cigarette making machine operator	81681
81689	Other tobacco products machine operators	81689
8169	<u>Food and Related Products Machine Operators Not Elsewhere Classified</u>	
81691	Bean curd making machine operator	81691
81692	Ice making machine operator	81692
81693	Feed mixing machine operator	81693
81694	Fish feed making machine operator	81694
81699	Other food and related products machine operators n.e.c.	81699
817	<b>WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS</b>	
8171	<u>Pulp and Papermaking Plant Operators</u>	
81711	Paper pulp plant operator	81711
81712	Papermaking machine operator	81712
81719	Other pulp and papermaking plant operators	81719
8172	<u>Wood Processing Plant Operators</u>	
81721	Sawyer	81721
81722	Veneer cutter	81722
81723	Plywood core layer	81723
81724	Plywood press operator	81724
81725	Wood grader	81725
81729	Other wood processing plant operators	81729
8173	<u>Wood Products Machine Operators</u>	
81731	Woodworking machine setter-operator	81731
81732	Precision wood sawyer	81732
81739	Other wood products machine operators	81739

SSOC 2015	OCCUPATION	SSOC 2010
818	<b>OTHER STATIONARY PLANT AND MACHINE OPERATORS</b>	
8181	<u>Glass and Ceramics Plant Operators</u>	
81811	Glass/Ceramics kiln machine operator	81811
81812	Fibreglass maker	81812
81819	Other glass and ceramics plant operators	81819
8182	<u>Steam Engine and Boiler Operators</u>	
81821	Boiler fireman	81821
81822	Ship's fireman	81822
81823	Ship's oiler/greaser	81823
81829	Other steam turbine, boiler and engine operators	81829
8183	<u>Packing, Bottling and Labelling Machine Operators</u>	
81830	Packing/Bottling/Labelling machine operator	81830
8184	<u>Printing, Binding and Related Machine Operators</u>	
81841	Printing machine operator	81841
81842	Bookbinding machine operator	81842
81843	Book embossing machine operator	81843
81849	Other printing, binding and related machine operators	81849
8185	<u>Incineration Plant, Water Treatment and Related Machine Operators</u>	
81851	Stationary engine operator (general)	81851
81852	Compressor operator	81852
81853	Pumping station operator	81853
81854	Water treatment machine operator (waterworks)	81854
81855	Refrigeration system operator	81855
81859	Other incineration plant, water treatment and related machine operators	81859
8186	<u>Power Generating Plant Operators</u>	
81860	Power generating plant operator	81860
8187	<u>Petroleum and Natural Gas Refining Plant Operators</u>	
81871	Petroleum and natural gas refining plant operator	81871
81872	Cylinder filler/tester (compressed and liquefied gases)	81872
8188	<u>Automated Assembly Line and Industrial Robot Operators</u>	
81880	Automated assembly line/Industrial robot operator	81880
8189	<u>Stationary Plant and Machine Operators Not Elsewhere Classified</u>	
81890	Stationary plant and machine operator n.e.c.	81890

SSOC 2015	OCCUPATION	SSOC 2010
<b>82</b>	<b>ASSEMBLERS AND QUALITY CHECKERS</b>	
820	SUPERVISORS AND GENERAL FOREMEN OF ASSEMBLERS AND QUALITY CHECKERS	
8200	<u>Supervisors and General Foremen of Assemblers and Quality Checkers</u>	
82000	Supervisor/general foreman of assemblers and quality checkers	82000
821	ASSEMBLERS, QUALITY CHECKERS AND TESTERS	
8212	<u>Electrical and Electronic Equipment Assemblers</u>	
82121	Electrical equipment/component assembler	82121
82122	Electronic equipment/component assembler	82122
82123	Battery assembler	82123
8213	<u>Quality Checkers and Testers</u>	
82131	Electrical/Electronic products quality checker and tester	82131
82132	Mechanical products quality checker and tester	82132
82139	Other quality checkers and testers	82139
8219	<u>Assemblers Not Elsewhere Classified</u>	
82191	Toy assembler	82191
82199	Other assemblers n.e.c. (eg plastic products assembler, rubber products assembler)	82199
<b>83</b>	<b>DRIVERS AND MOBILE MACHINERY OPERATORS</b>	
830	MOBILE MACHINERY SUPERVISORS AND GENERAL FOREMEN	
8300	<u>Mobile Machinery Supervisors and General Foremen</u>	
83000	Mobile machinery supervisor and general foreman	83000
831	MRT TRAIN OPERATORS AND RELATED WORKERS	
8311	<u>MRT Train Operators</u>	
83110	MRT train operator	83110
8312	<u>Railway Brakers and Related Workers</u>	
83121	Railway brakeman/signalman/shunter	83121
83129	Other railway brakers and related workers	83129

SSOC 2015	OCCUPATION	SSOC 2010
832	CAR AND LIGHT GOODS VEHICLE DRIVERS	
8321	<u>Motorcycle Delivery Men</u>	
83210	Motorcycle delivery man	83210
8322	<u>Car, Taxi, Van and Light Goods Vehicle Drivers</u>	
83221	Taxi driver	83221
83222	Chauffeur	83222
83223	Van driver	83223
83224	Ambulance driver	83291
83225	Parking valet	83299 (part)
83229	Other car and light goods vehicle drivers	83299 (part)
833	HEAVY TRUCK AND BUS DRIVERS	
8331	<u>Bus and Tram Drivers</u>	
83311	Bus driver	83311
83312	Tram driver	83312
8332	<u>Heavy Truck and Lorry Drivers</u>	
83321	Lorry driver	83321
83322	Trailer-truck driver (including prime mover driver)	83322
83323	Fire-engine driver	83323
83324	Airport mobile equipment driver	83324
83325	Concrete mix truck driver	83329 (part)
83326	Waste truck driver (including hooklift trucks with roll-on containers)	83329 (part)
83329	Other heavy truck and lorry drivers	83329 (part)
834	MOBILE MACHINERY OPERATORS	
8342	<u>Earth Moving and Related Machinery Operators</u>	
83421	Excavating/Trench digging machine operator	83421
83422	Bulldozer operator	83422
83423	Dredge operator	83423
83424	Pile driver/Drilling machine operator	83424
83425	Road making machine operator	83425
83426	Tunnelling machine operator (including pipe jacking machine operator)	83426
83429	Other earth moving and related machinery operators	83429
8343	<u>Crane, Hoist and Related Equipment Operators</u>	
83431	Crane/Hoist operator (general)	83431
83432	Crane operator (port)	83432
83439	Other crane, hoist and related equipment operators	83439



Major Group 8: Plant and Machine Operators and Assemblers

SSOC 2015	OCCUPATION	SSOC 2010
8344	<u>Lifting Truck Operators</u>	
83441	Fork lift truck operator	83441
83449	Other lifting truck operators	83449
8349	<u>Mobile Machinery Operators Not Elsewhere Classified</u>	
83491	Motorised sweeper operator	83490 (part)
83499	Mobile machinery operator n.e.c. (eg mobile farm plant operator)	83490 (part)
835	SHIPS' DECK CREW AND RELATED WORKERS	
8350	<u>Ships' Deck Crew and Related Workers</u>	
83501	Helmsman/Steersman	83501
83502	Deckhand (including lighterman)	83502
83509	Other ships' deck crew and related workers	83509

SSOC 2015	OCCUPATION	SSOC 2010
<b>9</b>	<b><u>CLEANERS, LABOURERS AND RELATED WORKERS</u></b>	
<b>91</b>	<b>CLEANERS AND RELATED WORKERS</b>	
910	CLEANING SUPERVISORS	
9100	<u>Cleaning Supervisors</u>	
91000	Cleaning supervisor	91000
911	CLEANERS AND HELPERS IN HOTELS, OFFICES AND OTHER ESTABLISHMENTS	
9112	<u>Cleaners and Helpers in Hotels and Related Establishments</u>	
91121	Room steward/Chambermaid	91121
91122	Hotel cleaner	91122
91129	Other cleaners and helpers in hotels and related establishments	91129
9113	<u>Cleaners in Offices</u>	
91130	Office cleaner	91131
9114	<u>Cleaners in Industrial Establishments</u>	
91140	Industrial establishment cleaner	91132
9115	<u>Cleaners in Food and Beverage Establishments</u>	
91151	Food and beverage establishment cleaner (eg restaurants, food courts, hawker centres)	91139 (part)
91152	Dish washer/Plate collector/Table-top cleaner	94104
9116	<u>Cleaners in Residential Areas</u>	
91160	Residential area cleaner (eg HDB estates, condominiums, private apartments, common areas within residential estates)	91139 (part)
9117	<u>Cleaners in Open Areas</u>	
91170	Cleaner in open areas (eg bus stops, drains, waterways, overhead bridges, roads, expressways, parks, beaches)	96130 (part)
9119	<u>Cleaners in Other Establishments</u>	
91190	Cleaner in other establishments (eg shopping malls, schools, hospitals, places of worship)	91139 (part) 96130 (part)

SSOC 2015	OCCUPATION	SSOC 2010
912	VEHICLE, WINDOW, LAUNDRY AND OTHER HAND CLEANING WORKERS	
9121	<u>Hand Launderers and Pressers</u>	
91210	Hand launderer/presser (non-household)	91210
9122	<u>Vehicle Cleaners</u>	
91220	Motor vehicle cleaner/polisher	91220
9123	<u>Window Cleaners</u>	
91230	Window cleaner	91230
9129	<u>Cleaning Workers Not Elsewhere Classified</u>	
91291	Ship/Ship tank cleaner	91291
91292	Aircraft cleaner	91292
91293	Railway carriage cleaner (include MRT, LRT and monorail)	91293
91299	Other cleaning workers n.e.c.	91299
913	DOMESTIC HELPERS AND CLEANERS	
9130	<u>Domestic Helpers and Cleaners</u>	
91301	Domestic helper (general)	91301
91309	Other domestic helpers and cleaners	91309
<b>92</b>	<b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b>	
921	AGRICULTURAL, FISHERY AND RELATED LABOURERS	
9214	<u>Park and Garden Maintenance Workers</u>	
92141	Garden labourer	92141
92142	Grass cutter	92142
92143	Tree cutter	92143
92149	Other park and garden maintenance workers (including landscape worker)	92149
9219	<u>Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified</u>	
92190	Agricultural and fishery labourer and related worker n.e.c. (eg farm labourer)	92190

SSOC 2015	OCCUPATION	SSOC 2010
<b>93</b>	<b>LABOURERS AND RELATED WORKERS</b>	
931	CONSTRUCTION LABOURERS AND RELATED WORKERS	
9310	<u>Civil Engineering and Building Construction Labourers</u>	
93100	Civil engineering/Building construction labourer	93100
932	MANUFACTURING LABOURERS AND RELATED WORKERS	
9320	<u>Manufacturing Labourers and Related Workers</u>	
93201	Hand packer	93201
93209	Manufacturing labourer and related worker n.e.c. (eg rubber sheets clipper and sorter)	93209
933	TRANSPORT AND STORAGE LABOURERS	
9331	<u>Hand and Pedal Vehicle Drivers</u>	
93310	Hand/Pedal vehicle driver	93310
9333	<u>Material and Freight Handling Workers</u>	
93331	Stevedore	93331
93332	Railway/Road vehicle loader	93332
93333	Aircraft loader (eg airport baggage/cargo handler)	93333
93334	Godown labourer	93334
93335	Lorry attendant	93335
93336	Mover	93336
93337	Lashing worker	93339 (part)
93339	Other material and freight handling workers	93339 (part)
<b>94</b>	<b>FOOD PREPARATION AND KITCHEN ASSISTANTS</b>	
941	FOOD PREPARATION AND KITCHEN ASSISTANTS	
9410	<u>Food Preparation and Kitchen Assistants</u>	
94101	Kitchen assistant	94101
94102	Food/Drink stall assistant	94102
94103	Fast food preparer	94103
94104	Tea server/steward (excluding bartender, barista and food/drink stall assistant)	new item

SSOC 2015	OCCUPATION	SSOC 2010
<b>96</b>	<b>WASTE AND RECYCLABLES COLLECTION WORKERS AND OTHER ELEMENTARY WORKERS</b>	
960	WASTE AND RECYCLABLES COLLECTION SUPERVISORS	
9600	<u>Waste and Recyclables Collection Supervisors</u>	
96000	Waste and recyclables collection supervisor	new item
961	WASTE AND RECYCLABLES COLLECTION WORKERS	
9611	<u>Waste and Recyclables Collection Workers</u>	
96111	General waste and recyclables collection worker	96111
96112	Recyclables sorter	96112
96113	Greasy waste collection worker	96119 (part)
96119	Other waste and recyclables collection worker	96119 (part)
962	PORTERS, ATTENDANTS AND RELATED WORKERS	
9621	<u>Porters and Related Workers</u>	
96211	Bell captain	96211
96212	Bellboy/Hotel porter	96212
96213	Porter (except hotel)	96213
9625	<u>Attendants</u>	
96251	Office/Library attendant	96251
96252	Laboratory attendant	96252
96253	Hospital/Clinic attendant	96253
96254	Car park attendant	96254
96255	Sports and recreational attendant (eg golf marshal, golf caddie, fun fair attendant, bowling alley attendant, swimming pool attendant)	96259 (part)
96256	Bus attendant	96259 (part)
96257	Restroom attendant	96259 (part)
96259	Other attendants	96259 (part)
9626	<u>Watchmen and Related Workers</u>	
96261	Building caretaker/Watchman	96261
96262	Doorman	96262
96269	Other watchmen and related workers (eg lighthouse keeper)	96269
9629	<u>Other Elementary Workers</u>	
96291	Leaflet and newspaper distributor/deliverer	96291
96292	Meter reader/Vending-machine collector	96292
96293	Odd job person	96293
96299	Other elementary workers n.e.c.	96299

Major Group X: Workers Not Elsewhere Classified

---

SSOC 2015	OCCUPATION	SSOC 2010
<b>X</b>	<b><u>WORKERS NOT ELSEWHERE CLASSIFIED</u></b>	
X1000	Worker reporting unidentifiable or inadequately described occupation	X1000
X2000	Worker not reporting any occupation	X2000
X3000	Singapore armed forces personnel	X3000
X4000	Foreign armed forces personnel	X4000
X5000	Foreign diplomatic personnel	X5000

# Description of Major Groups

## **1 Legislators, Senior Officials and Managers**

Legislators, senior officials and managers plan, direct, coordinate and evaluate the overall activities of enterprises, governments and other organisations, or of organisational units within them, and formulate and review their policies, laws, rules and regulations.

Tasks performed by legislators, senior officials and managers usually include: formulating and advising on the policy, budgets, laws and regulations of enterprises, governments and other organisational units; establishing objectives and standards and formulating and evaluating programmes and policies and procedures for their implementation; ensuring appropriate systems and procedures are developed and implemented to provide budgetary control; authorising material, human and financial resources to implement policies and programmes; monitoring and evaluating performance of the organisation or enterprise and of its staff; selecting, or approving the selection of staff; ensuring compliance with health and safety requirements; planning and directing daily operations; representing and negotiating on behalf of the government, enterprise or organisational unit managed in meetings and other forums.

## **2 Professionals**

Professionals increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these activities. Competent performance in most occupations in this major group requires skills at the fourth ISCO skill level.

Tasks performed by professionals usually include: conducting analysis and research, and developing concepts, theories and operational methods, and advising on or applying existing knowledge related to physical sciences including mathematics, engineering and technology, and to life sciences including the medical and health services, as well as to social sciences and humanities; teaching the theory and practice of one or more disciplines at different educational levels; teaching and educating handicapped persons; providing various business, legal and social services; creating and performing works of art; providing spiritual guidance; preparing scientific papers and reports. Supervision of other workers may be included.

## **3 Associate Professionals and Technicians**

Associate professionals and technicians perform mostly technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations. Most occupations in this major group require skills at the third ISCO skill level.



Tasks performed by associate professionals and technicians usually include: undertaking and carrying out technical work connected with research and the application of concepts and operational methods in the fields of physical sciences including engineering and technology, life sciences including the medical profession, and social sciences and humanities; initiating and carrying out various technical services related to trade, finance, administration, including administration of government laws and regulations, and to social work; providing technical support for the arts and entertainment participating in sporting activities; executing some religious tasks. Supervision of other workers may be included.

#### **4 Clerical Support Workers**

Clerical support workers record, organise, store, compute and retrieve information related, and perform a number of clerical duties in connection with money-handling operations, travel arrangements, requests for information and appointments. Most occupations in this major group require skills at the second ISCO skill level.

Tasks performed by clerical support workers usually include: stenography, typing, and operating word processors and other office machines; entering data into computers; carrying out secretarial duties; recording and computing numerical data; keeping records relating to stocks, production and transport; keeping records relating to passenger and freight transport; carrying out clerical duties in libraries; filing documents; preparing and checking material for printing; writing on behalf of illiterate persons; performing money-handling operations; dealing with travel arrangements; supplying information requested by clients and making appointments; operating a telephone switchboard. Supervision of other workers may be included.

#### **5 Service and Sales Workers**

Service and sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets. Most occupations in this major group require skills at the second ISCO skill level.

Tasks performed by service and sales workers usually include: organising and providing services during travel; carrying out duties in connection with mail services; housekeeping; preparing and serving of food and beverages; caring for children; providing personal and basic health care at homes or in institutions, as well as hairdressing, beauty treatment and companionship; telling fortunes; embalming and arranging funerals; providing security services and protecting individuals and property against fire and unlawful acts; enforcing of law and order; posing as models for

advertising, artistic creation and display of goods; selling goods in wholesale or retail establishments, as well as at stalls and on markets; demonstrating goods to potential customers. Supervision of other workers may be included.

## **6 Agricultural and Fishery Workers**

Agricultural and fishery workers grow and harvest field or tree and shrub crops, breed or tend animals, produce a variety of animal husbandry products, cultivate, conserve and exploit forests, breed or catch fish and cultivate or gather other forms of aquatic life in order to provide food, shelter and income for themselves and their households. Most occupations in this major group require skills at the second ISCO skill level.

Tasks performed by agricultural and fishery workers usually include: preparing the soil; sowing, planting, spraying, fertilising and harvesting field crops; growing fruit and other tree and shrub crops; growing garden vegetables and horticultural products; breeding, raising or tending animals mainly to obtain meat, milk, hair, fur, skin, sericultural, apiarian or other products; cultivating, conserving and exploiting forests; breeding or catching fish; cultivating or gathering other forms of aquatic life; storing and carrying out some basic processing of their produce; selling their products to purchasers, marketing organisations or at markets. Supervision of other workers may be included.

## **7 Craftsmen and Related Trades Workers**

Craftsmen and related trades workers apply specific knowledge and skills in the fields to construct and maintain buildings, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods.

The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of all stages of the production process, the materials and tools used, and the nature and purpose of the final product. Most occupations in this major group require skills at the second ISCO skill level.

Tasks performed by craftsmen and related trades workers usually include: constructing, maintaining and repairing buildings and other structures; casting, welding and shaping metal; installing and erecting heavy metal structures, tackle and related equipment; making machinery, tools, equipment, and other metal articles; setting for operators, or setting and operating various machine tools; fitting, maintaining and repairing industrial machinery, including engines and vehicles, as well as electrical and

electronic instruments and other equipment; making precision instruments, jewellery, household and other precious-metal articles, pottery, glass and related products; producing handicrafts; executing printing work; producing and processing foodstuffs and various articles made of wood, textiles, leather and related materials. Supervision of other workers may be included.

## **8 Plant and Machine Operators and Assemblers**

Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures.

The work mainly calls for experience with and an understanding of industrial and agricultural machinery and equipment as well as an ability to cope with machine-paced operations and to adapt to technological innovations. Most occupations in this major group require skills at the second ISCO skill level.

Tasks performed by plant and machine operators and assemblers usually include: operating and monitoring mining or other industrial machinery and equipment for processing metal, minerals, glass, ceramics, wood, paper, or chemicals; operating and monitoring machinery and equipment used to produce articles made of metal, minerals, chemicals, rubber, plastics, wood, paper, textiles, fur, or leather, and which process foodstuffs and related products; driving and operating trains and motor vehicles; driving, operating and monitoring mobile industrial and agricultural machinery and equipment; assembling products from component parts according to strict specifications and procedures. Supervision of other workers may be included.

## **9 Cleaners, Labourers and Related Workers**

Cleaners, labourers and related workers perform simple and routine tasks which may require the use of hand-held tools and considerable physical effort. Most occupations in this major group require skills at the first ISCO skill level.

Tasks performed by cleaners, labourers and related workers usually include: cleaning, restocking supplies and performing basic maintenance in apartments, houses, kitchens, hotels, offices and other buildings; washing cars and windows; helping in kitchens and performing simple tasks in food preparation; delivering messages or goods; carrying luggage and handling baggage and freight; stocking vending machines or reading and emptying meters; collecting and sorting refuse; sweeping streets and similar places; performing various simple farming, fishing, hunting or trapping tasks; performing simple tasks connected with construction and manufacturing including

product-sorting; packing and unpacking produce by hand and filling shelves; pedalling or hand-guiding vehicles to transport passengers and goods. Supervision of other workers may be included.

## **X Workers Not Elsewhere Classified**

The following types of working persons, where information on their job duties are often difficult to obtain, are classified in major group X:

- Workers reporting inadequately described occupations
- Workers not reporting any occupation
- Singapore Armed Forces personnel
- Foreign armed forces personnel stationed in Singapore
- Foreign diplomatic personnel stationed in Singapore

# Description of Unit Groups

**1111 Legislators**

Legislators determine, formulate and direct government policies and make, ratify, amend or repeal laws, public rules and regulations.

Tasks include:

- presiding over or participating in the proceedings of parliament
- determining, formulating and directing government policies
- making, ratifying, amending or repealing laws, public rules and regulations
- investigating matters of concern to the public and promoting the interests of the constituencies which they represent
- as members of the government, directing senior administrators and officials of government departments and statutory boards in the interpretation and implementation of government policies

This unit group includes:

- Government minister
- Member of parliament
- President (government)

Notes Legislators who are principally engaged in other full-time occupations are classified in the group appropriate to their main occupations and not here.

**1112 Senior Government and Statutory Board Officials**

Senior government and statutory board officials advise governments on policy matters, and oversee the interpretation and implementation of government policies and legislation by government departments and agencies.

Tasks include:

- advising government and legislators on policy matters
- advising on the preparation of government budgets, laws and regulations, including amendments
- establishing objectives for government departments or statutory boards in accordance with government legislation and policy
- formulating or approving and evaluating programmes and procedures for the implementation of government policies in conjunction or consultation with government
- ensuring appropriate systems and procedures are developed and implemented to provide budgetary control
- co-ordinating activities with other senior government officials
- making presentations to legislative and other government committees regarding policies programmes or budgets
- overseeing the interpretation and implementation of government policies and legislation by government departments and statutory boards

This unit group includes:

- Ambassador (government)
- High commissioner (government)
- Director-General
- Permanent secretary (government)
- Deputy secretary (government)
- Chairman (statutory board)
- Chief executive (statutory board)
- Commissioner of Civil Defence Force
- Commissioner of Police

Notes Government employees who are seconded to manage government-owned or government-controlled industrial, commercial or other business enterprises are excluded and classified in the same group as managers of similar private establishments. Government employees performing mainly professional functions are classified in Major Group 2.

**1114 Senior Officials of Political Party Organisations**

Senior officials of political party organisations determine, formulate and direct the implementation of policies of political-party organisations.

Tasks include:

- determining and formulating the policies, rules and regulations of the organisation
- planning, directing and coordinating the general functioning of the organisation
- negotiating on behalf of the organisation, its members and clients
- promoting the interests of the organisation, its members and clients before the legislature, government or general public
- planning, organising and directing sections charged with implementing the organisation's policies, rules and regulations
- ensuring appropriate systems and procedures are developed and implemented to provide budgetary control

**1115 Senior Officials of Employers', Workers' and Other Economic-Interest Organisations**

Senior officials of employers', workers' and other economic-interest organisations determine, formulate and direct the implementation of policies of employers', workers' and other economic-interest organisations.

Tasks include:

- determining and formulating the policies, rules and regulations of the organisation
- planning, directing and coordinating the general functioning of the organisation
- negotiating on behalf of the organisation, its members and clients
- promoting the interests of the organisation, its members and clients before the legislature, government or general public
- planning, organising and directing sections charged with implementing the organisation's policies, rules and regulations
- ensuring appropriate systems and procedures are developed and implemented to provide budgetary control

This unit group includes:

- General secretary of labour union
- President of business federation

**1116 Senior Officials of Humanitarian and Other Special-Interest Organisations**

Senior officials of humanitarian and other special-interest organisations determine, formulate and direct the implementation of policies of humanitarian and other special-interest organisations, such as humanitarian or charitable organisations, or sports associations, and represent their organisations and act on their behalf.

Tasks include:

- determining and formulating the policies, rules and regulations of the organisation
- planning, directing and coordinating the general functioning of the organisation
- negotiating on behalf of the organisation, its members and clients
- promoting the interests of the organisation, its members and clients before the legislature, government or general public
- planning, organising and directing sections charged with implementing the organisation's policies, rules and regulations
- ensuring appropriate systems and procedures are developed and implemented to provide budgetary control

This unit group includes:

- President of sports association
- President of humanitarian organisation



**1120 Managing Directors, Chief Executives and General Managers**

Managing directors, chief executives and general managers participate as members of boards of directors to formulate and review the policies and plan, direct, coordinate and evaluate the overall activities of enterprises or organisations with the support of other managers.

Tasks include:

- planning, directing and coordinating the general functioning of an enterprise or organisation
- determining objectives, strategies, policies and programmes for the enterprise or organisation
- providing overall leadership and management to the enterprise or organisation
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- authorising material, human and financial resources to implement organisational policies and programmes
- monitoring and evaluating performance of the organisation or enterprise against established objectives and policies
- consulting with senior subordinate staff and reviewing recommendations and reports
- representing the organisation at official occasions and board meetings, in negotiations, at conventions, seminars, public hearings and forums
- ensuring the organisation complies with relevant legislation and regulations

This unit group includes:

- Chief executive
- Company board director
- Company chairman
- Chief operating officer
- General manager
- Managing director

**Notes** Regional managers and other senior managers who coordinate and supervise the activities of subordinate managers who have a diverse range of functional responsibilities are included in Unit Group 1120 'Managing directors, chief executives and general managers'.

Managers responsible for particular specialised functions within a specific geographic area are however excluded from this unit group. For example, regional sales managers are classified in Unit Group 1221 'Sales, marketing and business development managers'. Jobs whose principal responsibility is to participate as a member of the board of directors of one or more enterprises or organisations are included in Unit Group 1120 'Managing directors, chief executives and general managers'. Chief executives of government owned enterprises are also included in this unit group.

**1211 Finance and Administration Managers**

Finance and administration managers plan, direct and coordinate the financial and administrative operations of an enterprise or organisation, in consultation with senior managers and with managers of other departments or sections.

Tasks include:

- planning, directing and coordinating the financial and administrative operations of an enterprise or organisation
- assessing the financial situation of the enterprise or organisation, preparing budgets and overseeing financial operations
- consulting with the chief executive and with managers of other departments or sections
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- establishing and directing operational and administrative procedures
- developing and implementing administrative and procedural statements and guidelines for use by staff in the organisation
- providing information and support for the preparation of financial reports and budgets
- representing the enterprise or organisation in dealings with outside bodies

This unit group includes:

- Administration manager
- Finance manager
- Financial controller

This unit group excludes:

- Financial and insurance services manager (1346)

**1212 Human Resource Managers**

Human resource managers, plan, direct and coordinate policies concerning the personnel and industrial relations of an enterprise or organisation, or of enterprises that provide human resource services to other enterprises and organisations.

Tasks include:

- planning, directing and coordinating the personnel and industrial relations activities, policies and practices of an enterprise or organisation
- planning and organising procedures for recruitment, training, promotion, determination of wage structures and negotiations about wages, liaison and consultation with workers and related personnel matters
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- establishing and directing operational and administrative procedures
- overseeing the development and implementation of management information systems
- ensuring compliance with standards and legislation relating to employees rights, , equal opportunity and related concerns
- overseeing the selection, training and performance of staff for the entire enterprise or organisation

- consulting with senior management and with managers of other departments
- representing the enterprise or organisation in dealings with outside bodies

This unit group includes:

- Human resource manager
- Industrial relations manager
- Personnel manager
- Training manager

### 1213 **Policy and Planning Managers**

Policy and planning managers plan, organise, direct and coordinate policy advice and strategic planning activities within government or for non-government organisations and private sector agencies, or manage the activities of enterprises that provide policy and strategic planning services.

Tasks include:

- developing, implementing and monitoring strategic plans, programmes, policies, processes, systems and procedures to achieve goals, objectives and work standards
- developing, directing, administering and participating in policy research and analysis
- coordinating the implementation of policies and practices
- establishing activity measures and measurements of accountability
- planning and directing daily operations
- leading and managing the activities of policy development and strategic planning staff
- representing the enterprise or organisation in negotiations, and at conventions, seminars, public hearings and forums
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- consulting with managers of other departments and with representatives of clients

This unit group includes:

- Policy and planning manager
- Strategic planning manager
- Corporate planning manager

### 1219 **Business Services and Administration Managers Not Elsewhere Classified**

This unit group covers business services and administration managers not classified elsewhere in Minor Group 121 'Business services and administration managers'. For instance, the group includes occupations such as facilities maintenance manager.

Tasks include:

- providing operational support and advice to senior management on matters such as the management of building facilities
- providing information and support for the preparation of financial reports and budgets
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- planning and directing daily operations

This unit group includes:

- Cleaning services manager
- Facilities manager
- Landscape operations manager
- Building security manager

#### 1221 **Sales, Marketing and Business Development Managers**

Sales, marketing and business development managers plan, direct and coordinate the sales and marketing activities of an enterprise or organisation, or of enterprises that provide sales and marketing services to other enterprises and organisations.

Tasks include:

- planning and organising special sales and marketing programmes based on sales records and market assessments
- determining price lists, discount and delivery terms, sales promotion budgets, sales methods, special incentives and campaigns
- establishing and directing operational and administrative procedures related to sales and marketing activities
- leading and managing the activities of sales and marketing staff
- establishing and managing budgets and controlling expenditure to ensure the efficient use of resources
- representing the enterprise or organisation at sales and marketing conventions, and trade exhibitions

This unit group includes:

- Commercial manager
- Marketing manager
- Sales manager
- Business development manager

#### 1222 **Advertising and Public Relations Managers**

Advertising and public relations managers plan, direct and coordinate the advertising, public relations and public information activities of enterprises and organisations, or of enterprises that provide related services to other enterprises and organisations.

Tasks include:

- planning, directing and coordinating the advertising and public relations activities of an enterprise or organisation
- negotiating advertising contracts with clients or with newspapers, radio and television stations, sports and cultural organisations and advertising agencies
- planning and managing information programmes to inform legislators, the mass media and the general public about the plans, accomplishments and points of view of the enterprise or organisation
- leading and managing the activities of advertising and public relations staff

This unit group includes:

- Advertising manager
- Customer relations manager
- Public relations manager
- Publicity manager

**1223 Research and Development Managers**

Research and development managers plan, direct and coordinate the research and development activities of an enterprise or organisation or of enterprises that provide related services to other enterprises and organisations.

Tasks include:

- planning, directing and coordinating research and development activities, in-house or commissioned from external research organisations, to develop new or improved technical processes, products or utilisation of materials
- planning the overall research and development programme of an enterprise or organisation, specifying goals and budgetary requirements
- leading and managing the activities of research and development staff

This unit group includes:

- Research and development manager

**1224 Customer Service and Call Centre Managers**

Customer service and call centre managers plan, organise and control the operations of call centres, review customer services, and maintain sound customer relations.

Tasks include:

- developing and reviewing policies, programmes and procedures concerning customer relations and goods and services provided
- ensuring operational efficiency within a call centre
- providing direction and feedback to team members and assisting with recruitment
- managing, motivating and developing staff providing customer services
- planning and implementing after-sales services to follow up with customer satisfaction, ensure performance of goods purchased, and modify and improve services provided
- liaising with other organisational units, service agents and customers to identify and respond to customer expectations

This unit group includes:

- Customer service manager
- Call centre manager

**1310 Production Managers in Agriculture and Fisheries**

Production managers in agriculture and fisheries plan, direct, and coordinate growing and production of crops and fish.

Tasks include:

- monitoring market activity and planning production to meet contract requirements and market demand
- establishing and managing budgets, monitoring production output and costs, recording information such as farm management practices and preparing financial and operational reports
- conferring with buyers to arrange for the sale of crops and fish

- contracting with farmers or independent owners for production of crops and livestock, or for management of production
- contracting with fishing skippers or owners of vessels and aquaculture farms for fishing and aquaculture operations, or for management of production
- planning the type, intensity and sequence of farm operations (e.g. determining the best times for planting, spraying and harvesting)
- analysing soil to determine types and quantities of fertiliser required for maximum production
- purchasing machinery, equipment, and supplies such as tractors, seed, fertiliser and chemicals
- identifying and controlling environmental toxins, weeds, pests and diseases
- organising farming operations such as maintaining buildings, water supply systems and equipment
- directing and coordinating activities such as planting, irrigation, chemical application, harvesting and grading
- directing and monitoring trapping and spawning of fish, egg incubation, and fry rearing, applying knowledge of management and fish culturing techniques
- inspecting plantations and fields to determine maturity dates of crops, or to estimate potential crop damage from weather
- overseeing the selection, training and performance of workers and contractors

This unit group includes:

- Farm production manager
- Agriculture manager
- Working proprietor (agriculture)

This unit group excludes:

- Poultry farm worker (6122)
- Fish farm worker (6221)

### 1321 **Manufacturing Managers**

Manufacturing managers plan, direct, and coordinate manufacturing production activities of large enterprises or as the manager of a small manufacturing company.

Tasks include:

- determining, implementing and monitoring production strategies, policies and plans
- planning details of production activities in terms of output quality and quantity, cost, time available and labour requirements
- controlling the operation of production plant and quality procedures through planning of maintenance, designation of operating hours and supply of parts and tools
- establishing and managing budgets, monitoring production output and costs, and adjusting processes and resources to minimise costs
- consulting with and informing other managers about production matters
- overseeing the acquisition and installation of new plant and equipment
- controlling the preparation of production records and reports
- coordinating the implementation of occupational health and safety requirements
- identifying business opportunities and determining products to be manufactured

- researching and implementing regulatory and statutory requirements affecting manufacturing operations and the environment
- overseeing the provision of quotes for the manufacture of specialised goods and establishing contracts with customers and suppliers

This unit group includes:

- Manufacturing plant manager
- Production and operations manager (manufacturing)
- Working proprietor (manufacturing)

### 1323 **Construction Managers**

Construction managers plan, direct and coordinate the construction of civil engineering projects, buildings and dwellings.

Tasks include:

- negotiating with building owners, property developers and subcontractors involved in the construction process to ensure projects are completed on time and within budget
- preparing tenders and contract bids
- operating and implementing coordinated work programmes for sites
- ensuring adherence to building legislation and standards of performance, quality, cost and safety
- arranging submission of plans to local authorities
- building under contract, or subcontracting specialised building services
- arranging building inspections by relevant authorities
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources
- overseeing the selection, training and performance of staff and subcontractors

This unit group includes:

- Construction project manager
- Working proprietor (construction)

### 1324 **Transport, Supply, Distribution and Related Managers**

Transport, supply, distribution and related managers plan, direct and coordinate the supply, transportation, storage and distribution of goods.

Tasks include:

- determining, implementing and monitoring purchasing, storage and distribution strategies, policies and plans
- preparing and implementing plans to maintain required stock levels at minimum cost
- negotiating contracts with suppliers to meet quality, cost and delivery requirements
- monitoring and reviewing storage and inventory systems to meet supply requirements and control stock levels
- operating recording systems to track all movements of goods and ensuring re-ordering and re-stocking at optimal times
- liaising with other departments and customers concerning requirements for outward goods and associated forwarding transportation

- establishing and directing operational and administrative procedures

This unit group includes:

- Logistics manager
- Distribution manager
- Transport operations manager
- Warehousing manager
- Procurement and purchasing manager
- Working proprietor (transport)

### 1329 **Production and Operations Manager Not Elsewhere Classified**

This unit group covers production and operations manager not classified elsewhere in Minor Group 132 'Manufacturing, construction, transport, distribution and other production and operations managers'.

Tasks include:

- planning details of activities in terms of output quality and quantity, cost, timeliness and labour requirements
- conferring with other managers to set production quotas, plan extraction sites and develop policies for the removal of raw materials
- controlling the operation of plant and quality procedures through planning of maintenance, designation of operating hours and supply of equipment
- preparing tenders and contract bids
- establishing and managing budgets, monitoring production output and costs, and adjusting processes and resources to minimise costs
- overseeing the acquisition and installation of new plant and equipment
- controlling the preparation of production records and reports
- coordinating the implementation of health and safety requirements

This unit group includes:

- Electricity power plant manager
- Gas works manager
- Incinerator plant manager
- Shipyard manager
- Quality assurance manager
- Mining manager
- Water works manager

### 1330 **Information and Communications Technology Service Managers**

Information and communications technology service managers plan, direct and coordinate the acquisition, development, maintenance and use of computer and telecommunication systems within organisations.

Tasks include:

- consulting with users, management, vendors, and technicians to assess computing needs and system requirements and specifying technology to meet those needs
- formulating and directing information and communication technology (ICT) strategies, policies and plans



- directing the selection and installation of ICT resources and the provision of user training
- directing ICT operations, analysing workflow, establishing priorities, developing standards and setting deadlines
- overseeing the security of ICT systems
- assigning, reviewing, managing and leading the work of systems analysts, programmers, and other computer-related workers
- establishing and directing operational and administrative procedures
- representing the enterprise or organisation at ICT related conventions, seminars and conferences

This unit group includes:

- Chief information officer
- Information systems manager
- IT service manager
- Network and communications manager
- Software and applications manager
- Working proprietor (information and communications technology services)

#### 1341 **Child Care Services Managers**

Child care services managers plan, direct, coordinate and evaluate the provision of care for children in before-school, after-school, vacation and day care centres and services.

Tasks include:

- overseeing and coordinating the provision care for children in before-school, after-school, day and vacation care centres
- directing and supervising child carers in providing care and supervision for young children
- managing physical facilities and making sure all buildings and equipment are maintained to ensure the centre is a safe area for children, staff and visitors
- reviewing and interpreting government codes and developing procedures to meet codes (e.g. concerning safety and security)
- preparing and maintaining records and accounts for a child care centre
- recruiting and evaluating staff and coordinating their professional development

This unit group includes:

- Child care services manager

#### 1342 **Health Services Managers**

Health services managers plan, direct, coordinate and evaluate the provision of clinical and community healthcare services in hospitals, clinics, public health agencies and similar organisations.

Tasks include:

- providing overall direction and management for the service, facility, organisation or centre
- directing, supervising and evaluating the work activities of medical, nursing, technical, clerical, service, maintenance, and other personnel

- establishing objectives and evaluative or operational criteria for units they manage
- developing, implementing and monitoring procedures, policies and standards for medical, nursing, technical and administrative staff
- monitoring the use of diagnostic services, inpatient beds, facilities, and staff to ensure effective use of resources and assess the need for additional staff, equipment, and services
- liaising with other health and welfare service providers, boards and funding bodies to coordinate the provision of services
- advising government bodies about measures to improve health and welfare services and facilities
- representing the organisation in negotiations, and at conventions, seminars, public hearings and forums

This unit group includes:

- Clinical director
- Director of nursing

This unit group excludes:

- Aged care services manager (1343)

#### 1343 **Aged Care Services Managers**

Aged care services managers plan, direct, coordinate and evaluate the provision of residential and personal care services for individuals and families who are in need of such services due to the effects of ageing.

Tasks include:

- providing overall direction and management for a service, facility, organisation or centre
- directing, supervising and evaluating the work activities of medical, nursing, technical, clerical, service, maintenance and other personnel
- establishing objectives and evaluative or operational criteria for units they manage
- developing, implementing and monitoring procedures, policies and standards for nursing, personal care, technical, and administrative staff
- coordinating and administering welfare programmes and care services for the elderly
- controlling administrative operations such as budget planning, report preparation, expenditure on supplies, equipment and services
- liaising with other health and welfare providers, boards and funding bodies to coordinate the provision of services
- representing the organisation in negotiations, and at conventions, seminars, public hearings and forums

This unit group includes:

- Aged care service manager
- Nursing home director

This unit group excludes:

- Health services manager (1342)

**1344 Social Welfare Managers**

Social welfare managers plan, direct and coordinate the provision of social and community service programmes such as income support, family assistance, children's services and other community programmes and services.

Tasks include:

- providing overall direction and management for a service, facility, organisation or centre
- developing, implementing and monitoring procedures, policies and standards for staff
- monitoring and evaluating resources devoted to the provision of welfare, housing, and other social services
- controlling administrative operations such as budget planning, report preparation, expenditure on supplies, equipment and services
- liaising with other welfare and health services providers, boards and funding bodies to discuss areas of health and welfare service cooperation and coordination
- advising government bodies about measures to improve welfare services and facilities
- representing the organisation in negotiations and at conventions, seminars, public hearings and forums

This unit group includes:

- Social welfare manager

**1345 Education and Training Institution Managers**

Education and training institution managers plan, direct, coordinate and evaluate the educational and administrative aspects of education and training services, primary and secondary schools, colleges and faculties and departments in universities and other educational/training institutions.

Tasks include:

- determining educational and training programmes based on frameworks established by education authorities and governing bodies
- implementing systems and procedures to monitor school/institutional performance and student enrolments
- directing administrative and clerical activities concerning student admissions and educational services
- providing leadership and guidance to teaching, academic and administrative staff as well as to student
- evaluating the work of teachers, lecturers and trainers by visiting classrooms, observing teaching methods, reviewing instructional objectives and examining learning materials
- promoting the educational/training programme and representing the service or institution in the wider community
- supervising the maintenance of educational/training facilities
- developing and enforcing a disciplinary code to create a safe and conducive environment for students and teachers/trainers
- controlling selection, training and supervision of staff

This unit group includes:

- School principal
- Registrar (institution of higher learning)
- Dean (institution of higher learning)
- Head of training institutions

#### 1346 **Financial and Insurance Services Managers**

Financial and insurance services managers plan, direct and coordinate the provision of financial and insurance services in financial institutions, such as banks, building societies, credit unions and insurance companies. They provide advice and assistance to clients on financial and insurance matters.

Tasks include

- planning, directing and coordinating the activities of staff in the branch
- establishing and maintaining relationships with individual and business customers
- providing advice and assistance to customers on their financial and insurance needs and with matters such as changes in law that may affect customers
- examining, evaluating and processing loan and insurance applications
- monitoring credit extension decisions
- conducting financial investigations
- overseeing the flow of cash and financial instruments, and the preparation of financial and regulatory reports
- approving or rejecting, or coordinating the approval or rejection of lines of credit commercial, real estate and personal loans
- coordinating cooperation with other branches of the company

This unit group includes:

- Bank manager
- Insurance services manager

This unit group excludes:

- Finance manager (1211)
- Financial and investment adviser (2412)
- Financial analyst (2413)
- Credit and loans officer (3312)
- Insurance agent (3321)

**1349 Professional, Financial, Community and Social Services Managers Not Elsewhere Classified**

This unit group covers professional, financial, community and social services managers not classified elsewhere in Minor Group 134 'Professional, financial, community and social services managers'. For instance, managers responsible for the provision of policing, corrective, legal and fire services are classified here.

Tasks include:

- providing overall direction and management for a service, facility, organisation or centre
- developing, implementing and monitoring procedures, policies and standards for staff
- directing, supervising and evaluating the work activities of professional technical, clerical, service, maintenance and other personnel
- monitoring and evaluating resources devoted to the provision of services
- controlling administrative operations such as budget planning, report preparation, expenditure on supplies, equipment and services
- planning, directing and coordinating the provision of services
- coordinating cooperation with other service provision agencies in the same or related fields

This unit group includes:

- Corrective services manager
- Police superintendent

**Notes** Professional services managers are responsible for planning, directing and coordinating the provision of specialised professional and technical services. Specialised qualifications and extensive experience relevant to one or more occupations classified in Major Group 2 'Professionals' or Major Group 3 'Associate professionals and technicians' are usually required.

**1411 Hotel Operations and Lodging Services Managers**

Hotel operations and lodging services managers plan, organise and direct the operations of hotels, motels and similar establishments to provide guest accommodation and other services.

Tasks include:

- directing and overseeing reservation, reception, room service and housekeeping activities
- supervising security arrangements and garden and property maintenance
- planning and supervising bar, restaurant, function and conference activities held in the hotel
- observing liquor, gaming and other laws and regulations
- assessing and reviewing customer satisfaction
- overseeing accounting and purchasing activities
- providing guests with local tourism information and arranging tours and transportation

This unit group includes:

- Hotel manager
- Motel manager
- Youth hostel manager

This unit group excludes:

- Restaurant manager (1412)

#### 1412 **Food and Beverages Services Managers**

Food and beverages services managers plan, organise and direct the operations of cafes, restaurants, catering companies and related establishments to provide dining and catering services.

Tasks include:

- planning menus in consultation with chefs and cooks
- planning and organising special functions
- arranging the purchasing and pricing of goods according to budget
- ensuring dining, kitchen and food storage facilities comply with health regulations and are clean, functional and of suitable appearance
- conferring with customers to assess their satisfaction with meals and service
- selecting, set staff work schedules, training and supervising waiting and kitchen staff
- negotiating arrangements with clients and suppliers

This unit group includes:

- Cafe manager
- Fast food restaurant manager
- Restaurant manager
- Catering services manager
- Working proprietor (restaurant and other catering services)

This unit group excludes:

- Chef (3434)

#### 1420 **Retail and Wholesale Trade Managers**

Retail and wholesale trade managers, plan, organise, co-ordinate and control the operations of establishments that sell goods on a retail or wholesale basis. They are responsible for the budgets, staffing and strategic and operational direction of shops, or of organisational units within shops that sell particular types of product.

Tasks include:

- determining product mix, stock levels and service standards
- formulating and implementing purchasing and marketing policies and setting prices
- promoting and advertising the establishment's goods and services
- maintaining records of stock levels and financial transactions
- undertaking budgeting for the establishment

This unit group includes:

- Departmental store manager
- Retail manager
- Supermarket manager

- Wholesale trade manager
- Working proprietor (retail trade)
- Working proprietor (wholesale trade)

This unit group excludes:

- Sales manager (1221)
- Sales supervisor (5220)
- Shop sales assistant (5220)

Notes Chief executives of groups of establishments such as supermarket or departmental store chains are classified, however, in Unit Group 1120 'Managing directors, chief executives and general managers'.

#### 1431 **Sports Centre Managers**

Sports centre managers plan, organise and control the operations of establishments that provide sporting services.

Tasks include:

- planning and organising the range and mix of sports and fitness programmes to be offered by the centre
- ensuring that facilities are kept clean and in good condition
- advising on the facilities available and promoting publicity in relation to events, shows and activities
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources for sports activities

This unit group includes:

- Sports centre manager

#### 1432 **Recreation Centre Managers**

Recreation centre managers plan, organise and control the operations of establishments that provide recreational and amenity services.

Tasks include:

- planning and organising the range and mix of entertainment programmes to be offered by the recreation centre
- ensuring that facilities are kept clean and in good condition
- advising on the facilities available and promoting publicity in relation to events, shows and activities

This unit group includes:

- Amusement/ theme park manager
- Casino manager
- Cinema manager
- Discotheque manager
- Karaoke lounge managers
- Leisure centre manager
- Wellness centre manager
- Community/country club manager

**1433 Arts and Cultural Centre Managers**

Arts and cultural centre managers plan, organise and control the operations of establishments that provide artistic and theatrical services.

Tasks include:

- planning and organising the range and mix of entertainment, attractions and cultural activities programmes to be offered by the centre
- ensuring that facilities are kept clean and in good condition
- keeping abreast of new trends and developments in the creative arts and arranging theatrical productions and performances by bands and orchestras
- advising on the facilities available and promoting publicity in relation to events, shows and activities

This unit group includes:

- Theatre manager
- Arts administrator
- Art gallery manager
- Museum manager

**1439 Other Services Managers Not Elsewhere Classified**

This unit group covers jobs responsible for planning, directing and coordinating the provision of services not classified in Minor Group 143 'Other services managers'. For instance, working proprietors (sports, recreation, arts and other services) are classified here.

Tasks include:

- planning and organising the range and mix of services or activities provided
- ensuring that facilities are kept clean and in good condition
- establishing and managing budgets
- controlling expenditure and ensuring the efficient use of resources

This unit group includes:

- Travel agency manager
- Working proprietor (sports, recreation, arts and other services)



**2111 Physicists and Astronomers**

Physicists and astronomers conduct research, improve or develop concepts, theories and operational methods concerning matter, space, time, energy, forces and fields and the interrelationship between these physical phenomena. They apply scientific knowledge relating to physics and astronomy in industrial, medical, military or other fields.

Tasks include:

- conducting research and improving or developing concepts, theories, instrumentation, software and operational methods related to physics and astronomy
- conducting experiments, tests and analyses on the structure and properties of matter in fields such as mechanics, thermodynamics, electronics, communications, power generation and distribution, aerodynamics, optics and lasers, remote sensing, medicine, sonics, magnetism, and nuclear physics
- evaluating results of investigations and experiments and expressing conclusions, mainly using mathematical techniques and models
- applying principles, techniques and processes to develop or improve industrial, medical, military and other practical applications of the principles and techniques of physics or astronomy
- ensuring, accurate measurement and characterisation of doses of radiation delivered to patients in medical applications of nuclear technology
- testing, commissioning and evaluating equipment used in applications such as imaging, medical treatment and dosimetry
- advising and consulting with medical practitioners and other healthcare professionals in optimising the balance between the beneficial and deleterious effects of radiation
- observing, analysing and interpreting celestial phenomena and developing methods, numerical models and techniques to extend knowledge of fields such as navigation, satellite communication, space exploration, celestial bodies and cosmic radiation
- maintaining and developing standards and protocols for measurement of physical phenomena and for the use of nuclear technology in industrial and medical applications
- preparing scientific papers and reports

This unit group includes:

- Astronomer
- Heat physicist
- Nuclear physicist
- Physicist

This unit group excludes:

- Radiation oncologist (2215)
- Radiologist (2214)
- Radiographer (2269)

**2112 Meteorologists**

Meteorologists prepare short-term or long-term weather forecasts used in aviation, shipping, agriculture and other areas and for the information of the general public. They conduct research related to the composition, structure and dynamics of the atmosphere.

Tasks include:

- investigating direction and speed of air movements, pressures, temperatures, humidity, physical and chemical transformation of pollutants and other phenomena such as cloud formation and precipitation, electrical disturbances or solar radiation
- studying data collected from meteorological stations, radar and satellite imagery and computer model output to plot and forecast weather conditions
- preparing and reporting short-term or long-term weather maps, forecasts and warnings relating to atmospheric phenomena such as cyclones, storms and other hazards to life and property and disseminating information about atmospheric conditions through a variety of media including radio, television, print and the Internet
- conducting experiments in fog dispersal, cloud seeding, rain enhancement and other types of weather modification programmes
- developing and testing mathematical computer models of weather and climate for experimental or operational use
- participating in studies of the effect of weather on the environment
- analysing the impact of industrial projects and human activity on the climate and quality of the air and work with the social science, engineering and economic communities to develop appropriate mitigation strategies
- engaging in the design and development of new equipment and procedures for meteorological data collection, remote sensing, or for related applications
- conducting research on and improving or developing concepts, theories and operational methods related to the composition, structure and dynamics of the atmosphere and preparing scientific papers and reports on the outcome of this research
- preparing scientific papers and reports

This unit group includes:

- Climatologist
- Hydrometeorologist
- Meteorologist
- Weather forecaster

**2113 Chemists**

Chemists conduct research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to chemistry, to develop new knowledge or products and for quality and process control.

Tasks include:

- conducting research and improving or developing concepts, instruments, theories and operational methods related to chemistry
- conducting experiments, tests and analyses to investigate chemical composition and energy and chemical changes in various natural or synthetic substances, materials and products
- developing procedures for environmental control, quality control and various other procedures for manufacturers or users
- conducting programmes of sample and data collection and analysis to identify and quantify environmental toxicants
- participating in interdisciplinary research and development projects working with chemical engineers, biologists, microbiologists, agronomists, geologists or other professionals
- using micro-organisms to convert substances into new compounds
- determining ways to strengthen or combine materials or develop new materials
- reproducing and synthesising naturally occurring substances and creating new artificial substances
- preparing scientific papers and reports

This unit group includes:

- Chemist
- Food chemist
- Petroleum chemist

**2114 Geologists, Geophysicists and Other Physical Science Professionals**

Geologists, geophysicists and other physical science professionals conduct research; improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to geology and geophysics in such fields as oil, gas and mineral exploration and extraction, water conservation, civil engineering, telecommunications and navigation, and assessment and mitigation of the effects of development and waste disposal projects on the environment.

Tasks include:

- conducting research and improving or developing concepts, theories and operational methods related to geology and geophysics
- studying composition and structure of the Earth's crust, examining rocks, minerals, fossils and other materials, to determine processes affecting the development of the Earth, trace evolution of past life, establish nature and chronology of geological formations and assess their commercial applications
- interpreting research data and preparing geological reports, maps, charts and diagrams, reports and papers
- using various remote sensing programmes to investigate and measure seismic, gravitational, electrical, thermal, and magnetic forces affecting the Earth

- estimating weight, size and mass of the Earth and composition and structure of its interior, and studying the nature, activity and predictability of volcanoes, glaciers and earthquakes
- charting the Earth's magnetic field and applying this and other collected data for broadcasting, navigation and other purposes
- studying and measuring physical properties of seas and the atmosphere and their inter-relationship, such as the exchange of thermal energy
- locating and determining the nature and extent of oil, gas and mineral deposits using seismological, gravimetric, magnetic, electrical or radiometric methods
- identifying deposits of construction materials and determining their characteristics and suitability for use as concrete aggregates, road fill or for other applications
- researching the movement, distribution and physical properties of ground and surface waters
- advising in areas such as waste management, route and site selection and the restoration of contaminated sites

This unit group includes:

- Geological oceanographer
- Geologist
- Geophysical oceanographer
- Geophysicist
- Hydrologist

2121

### **Mathematicians, Operations Research Analysts and Actuaries**

Mathematicians, operations research analysts and actuaries conduct research and improve or develop mathematical and actuarial concepts, theories and operational methods and techniques and advise on or engage in their practical application in such fields as engineering, business and social and other sciences.

Tasks include:

- studying, improving and developing mathematical and actuarial theories and techniques
- advising on or applying mathematical principles, models and techniques to a wide range of tasks in the fields of engineering, natural, social or life sciences
- conducting logical analyses of management problems, especially in terms of input-output effectiveness, and formulating mathematical models of each problem usually for programming and solution by computer
- designing and putting into operation pension schemes and life, health, social and other types of insurance systems
- preparing scientific papers and reports
- supervising the work of mathematical, operations research analyst and actuarial assistants

This unit group includes:

- Actuary
- Operations research analyst
- Mathematician

This unit group excludes:

- Statistical officer (2123)
- Statistical clerk (4314)
- Systems analyst (2511)

2122

### **Statisticians**

Statisticians conduct research and improve or develop statistical concepts, theories and operational methods and techniques and advise on or engage in their practical application in such fields as engineering, business and social and other sciences.

Tasks include:

- studying, improving and developing statistical theories and techniques
- applying statistics, probability and risk theory to assess potential financial impacts of future events
- planning and organising surveys and other statistical collections, and designing questionnaires
- evaluating, processing, analysing, and interpreting statistical data and preparing them for publication
- advising on or applying various data collection methods and statistical methods and techniques, and determining reliability of findings, especially in such fields as business or medicine as well as in other areas of natural, social or life sciences
- preparing scientific papers and reports
- supervising the work of statistical assistants and statistical clerks

This unit group includes:

- Statistician
- Statistician (applied statistics)

This unit group excludes:

- Statistical officer (2123)
- Statistical clerk (4314)

2123

### **Other Statistical, Mathematical and Actuarial Professionals**

Other statistical, mathematical and actuarial professionals assist in planning the collection, processing and presentation of statistical, mathematical or actuarial data and in carrying out these operations.

Tasks include:

- assisting in planning and performing statistical, mathematical, actuarial, accounting and related calculations
- preparing detailed estimates of quantities and costs of materials and labour required for statistical census and survey operations

- performing technical tasks connected with establishing, maintaining and using registers and sampling frames for census and survey operations
- performing technical tasks connected with data collection and quality control operations in censuses and surveys
- using standard computer software packages to perform mathematical, actuarial statistical accounting and related calculations
- preparing statistical, mathematical, actuarial, accounting and other results for presentation in graphical or tabular form
- applying knowledge of statistical, mathematical, actuarial, accounting and related principles and practices in order to identify and solve problems arising in the course of their work
- supervising the work of statistical clerks

This unit group includes:

- Statistical officer
- Research officer (statistical)
- Actuarial officer

This unit group excludes:

- Actuary (2121)
- Mathematician (2121)
- Statistician (2122)
- Statistical clerk (4314)

2131

### **Biologists, Botanists, Zoologists and Related Professionals**

Biologists, botanists, zoologists and related professionals study living organisms and their interactions with each other and with the environment, and apply this knowledge to solve human health and environmental problems. They work in diverse fields such as biology, botany, zoology, plant taxonomy and marine biology.

Tasks include:

- undertaking research in laboratories and in the field to increase scientific knowledge of living organisms; to discover new information; to test hypotheses
- designing and conducting experiments and tests
- gathering human, animal, insect and plant specimens and data, and studying their origin, development, chemical and physical form, structure, composition, and life and reproductive processes
- examining living organisms using a variety of specialised equipment, instruments, technologies and techniques such as electron microscopes, telemetry, global positioning systems, biotechnology, satellite imaging, genetic engineering, digital imaging analysis, polymerase chain reaction and computer modelling
- identifying, classifying, recording and monitoring living organisms and maintaining databases
- writing scientific papers and reports detailing research and any new findings which are then made available to the scientific community in scientific journals or at conferences for scrutiny and further debate

This unit group includes:

- Biologist
- Botanist
- Marine biologist
- Microbiologist
- Zoologist

This unit group excludes:

- Ecologist (2133)
- Bacteriologist (2134)
- Geneticist (2134)

## 2132 **Farming, Forestry and Fishery Advisers**

Farming, forestry and fishery advisers study and provide assistance and advice on farms, forestry and fisheries management, including cultivation, fertilisation, harvesting, soil erosion and composition, disease prevention, nutrition, crop rotation and marketing. They develop techniques for increasing productivity, and study and develop plans and policies for land and fisheries management.

Tasks include:

- collecting and analysing data and samples related to produce, feed soil, water quality and other production options
- advising on techniques for improving the production of crops, livestock and fish, and alternative production options
- advising on livestock and crop disease, control of pests and weeds, soil improvement, animal husbandry and feeding programmes
- studying the environmental factors affecting commercial crop production, pasture growth, animal breeding, fish stocks and the growth and health of forest trees
- studying the effects of cultivation techniques, soils, insects, diseases and fisheries practices on animal, crop, forestry and fisheries yield
- studying fish migration, growth, feeding and spawning and devising methods of collecting fertilising, incubating and hatching fish eggs
- researching into characteristics, use capability and productivity of soils and applying findings to development of improved agricultural, horticultural and forestry practices
- developing procedures and techniques for solving agricultural problems and improving the efficiency of production
- managing forest and fisheries resources to maximise their long-term commercial, recreational and environmental benefits
- studying the propagation and culture of forest trees, methods for improving the growth of stocks, and the effects of thinning on forest yields
- investigating, planning and implementing management procedures to cope with the effects of fires, floods, droughts, soil erosion, pests and diseases
- preparing scientific reports and conducting advisory information sessions and lectures for farming, forestry and fishing communities and other groups

This unit group includes:

- Agronomist
- Aquaculturist
- Forestry scientist
- Horticulturist
- Forestry adviser
- Silviculturist
- Soil scientist

2133

### **Environmental Protection and Related Professionals**

Environmental protection professionals study and assess the effects on the environment of human activity such as air, water and noise pollution, soil contamination, climate change, toxic waste and depletion and degradation of natural resources. They develop plans and solutions to protect, conserve, restore, minimise and prevent further damage to the environment.

Tasks include:

- conducting research, performing tests, collecting samples, performing field and laboratory analysis to identify sources of environmental problems and recommending ways to prevent, control and remediate the impact of environmental problems
- assessing the likely impact that potential or proposed activities, projects and developments may have on the environment, and recommending whether such developments should proceed
- developing and coordinating the implementation of environmental management systems to enable organisations to identify, monitor and control the impact of their activities, products and services on the environment
- conducting audits to evaluate environmental impact of existing activities, processes, wastes, noises and substances
- assessing an organisation's compliance with government and internal environmental regulations and guidelines, identifying violations and determining appropriate remedial action
- providing technical advice and support services to organisations on how best to deal with environmental problems in order to reduce environmental damage and minimise financial loss
- developing conservation plans

This unit group includes:

- Air pollution analyst
- Conservation officer
- Conservation scientist
- Ecologist
- Environmental officer (environmental protection)

This unit group excludes:

- Environmental engineer (2143)
- Environmental officer (environmental public health) (2263)



**2134 Pharmacologists and Related Professionals**

Pharmacologists and related professionals study the structure, composition, and life processes of humans, animals and micro-organisms and apply this knowledge to prevent disease in humans and animals, promote health and physical fitness and develop animals for economic exploitation. They work in diverse fields such as anatomy, genetics, pharmacology, physiology, bacteriology and virology.

Tasks include:

- undertaking research in laboratories and in the field to increase scientific knowledge of living organisms; to discover new information; to solve problems in areas such as the environment, agriculture and health; and to develop new products, processes and techniques for pharmaceutical, agricultural and environmental use
- designing and conducting experiments and tests
- gathering human, animal, insect and plant specimens and data, and studying their origin, development, chemical and physical form, structure, composition, and life and reproductive processes
- examining living organisms using a variety of specialised equipment, instruments, technologies and techniques such as electron microscopes, telemetry, global positioning systems, biotechnology, satellite imaging, genetic engineering, digital imaging analysis, polymerase chain reaction and computer modelling
- writing scientific papers and reports detailing research and any new findings which are then made available to the scientific community in scientific journals or at conferences for scrutiny and further debate
- designing and carrying out environmental impact assessments to identify changes caused by natural or human factors
- providing advice to governments, organisations and businesses in areas such as conservation, management of natural resources, the effects of climate change and pollution
- assisting researchers in their conduct and implementation of clinical research projects
- performing monitoring activities in accordance with Standard Operating Procedures (SOP), which include investigator/site selection as well as management and co-ordination of site related activities
- developing systems to track projects including all study, investigator and ethical review board information, patient recruitment activity and financial management

This unit group includes:

- Anatomist
- Bacteriologist
- Geneticist
- Biochemist
- Biophysicist
- Physiologist
- Pharmacologist
- Clinical research professional

This unit group excludes:

- Biologist (2131)
- Zoologist (2131)

**2141 Industrial and Production Engineers**

Industrial and production engineers conduct research and design, organise and oversee the construction, operation and maintenance of process plant and installations. They establish programmes for the coordination of manufacturing activities; and assess cost effectiveness and safety.

Tasks include:

- studying functional statements, organisational charts and project information to determine functions and responsibilities of workers and work units and to identify areas of duplication
- establishing work measurement programmes and analysing work samples to develop standards for labour utilisation
- analysing workforce utilisation, facility layout, operational data and production schedules and costs to determine optimum worker and equipment efficiencies
- developing specifications for manufacture, and determining materials, equipment, piping, material flows, capacities and layout of plant and systems
- organising and managing project labour and the delivery of materials, plant and equipment
- establishing standards and policies for installation, modification, quality control, testing, inspection and maintenance according to engineering principles and safety regulations
- inspecting plant to improve and maintain performance
- directing the maintenance of plant buildings and equipment, and coordinating the requirements for new designs, surveys and maintenance schedules
- advising management on new production methods, techniques and equipment
- liaising with materials buying, storing and controlling departments to ensure a steady flow of supplies

This unit group includes:

- Methods engineer
- Motion study engineer
- Production engineer
- Quality control engineer

This unit group excludes:

- Manufacturing production manager (1321)

**2142 Civil Engineers**

Civil engineers conduct research, advise on, design, and direct construction; manage the operation and maintenance of civil engineering structures; or study and advise on technological aspects of particular materials.

Tasks include:

- conducting research and developing new or improved theories and methods related to civil engineering
- advising on and designing structures such as bridges, dams, docks, roads, airports, railways, canals, pipelines, waste-disposal and flood-control systems, and industrial and other large buildings

- determining and specifying construction methods, materials and quality standards, and directing construction work
- establishing control systems to ensure efficient functioning of structures as well as safety and environmental protection
- organising and directing maintenance and repair of existing civil engineering structures
- analysing the behaviour of soil and rock when placed under pressure by proposed structures and designing structural foundations
- analysing the stability of structures and testing the behaviour and durability of materials used in their construction

This unit group includes:

- Civil engineer
- Civil/aerodrome construction engineer
- Civil/bridge construction engineer
- Civil/building construction engineer
- Civil/highway and street construction engineer
- Hydraulics engineer
- Structural engineer

This unit group excludes:

- Civil engineering project manager (1323)
- Town planners (2164)

2143

### **Environmental Engineers**

Environmental engineers conduct research, advise on, design and direct implementation of solutions to prevent, control or remedy negative impacts of human activity on the environment utilising a variety of engineering disciplines. They conduct environmental assessments of construction and civil engineering projects and apply engineering principles to pollution control, recycling and waste disposal.

Tasks include:

- conducting research, assessing and reporting on the environmental impact of existing and proposed construction, civil engineering and other activities
- inspecting industrial and municipal facilities and programmes to evaluate operational effectiveness and ensure compliance with environmental regulations
- designing and overseeing the development of systems, processes and equipment for control, management, or remediation of water, air, or soil quality
- obtaining, updating, and maintaining plans, permits, and standard operating procedures
- providing engineering and technical support for environmental remediation and litigation projects, including remediation system design and determination of regulatory applicability
- monitoring progress of environmental improvement programmes
- advising corporations and government agencies of procedures to follow in cleaning up contaminated sites to protect people and the environment

- collaborating with environmental scientists, planners, hazardous waste technicians, engineers from other disciplines, and specialists in law and business to address environmental problems

This unit group includes:

- Environmental engineer
- Sewerage engineer
- Sanitary engineer

#### 2144 **Mechanical Engineers**

Mechanical engineers conduct research; advise on, design, and direct production of machines, ships, machinery and industrial plant, equipment and systems, advise on and direct their functioning, maintenance and repair; or study and advise on mechanical aspects of particular materials, products or processes.

Tasks include:

- advising on and designing machinery and tools for manufacturing, mining, construction, agricultural, and other industrial purposes
- advising on and designing steam, internal combustion and other non-electric motors and engines used for propulsion of railway locomotives, road vehicles or aircraft, or for driving industrial or other machinery
- advising on and designing hulls, superstructures and propulsion systems of ships; mechanical plant and equipment for the release, control and utilisation of energy; heating, ventilation and refrigeration systems, steering gear, pumps, and other mechanical equipment
- advising on and designing airframes, undercarriages and other equipment for aircraft as well as suspension systems, brakes, vehicle bodies and other components of road vehicles
- advising on and designing non-electrical parts of apparatus or products such as word processors, computers, precision instruments, cameras and projectors
- establishing control standards and procedures to ensure efficient functioning and safety of machines, machinery, tools, motors, engines, industrial plant, equipment, or systems
- ensuring that equipment, operation and maintenance comply with design specifications and safety standards

This unit group includes:

- Aeronautical engineer
- Naval architect
- Marine engineer (shore-based)
- Mechanical engineer

This unit group excludes:

- Marine engineering officer (3151)

**2145 Chemical Engineers**

Chemical engineers conduct research and develop, advise on and direct commercial-scale chemical processes and production of various substances and items such as crude oil, petroleum derivatives, food and drink products, medicines, or synthetic materials. They direct maintenance and repair of chemical plant and equipment and study and advise on chemical aspects of particular materials, products or processes.

Tasks include:

- conducting research and advising on, and developing commercial-scale chemical processes to refine crude oil and other liquids or gases, and to produce substances and items such as petroleum derivatives, explosives, food and drink products, medicines or synthetic materials
- specifying chemical production methods, materials and quality standards and ensuring that they conform to specifications
- establishing control standards and procedures to ensure safety and efficiency of chemical production operations and safety of workers operating equipment or working in close proximity to on-going chemical reactions
- designing chemical plant equipment and devising processes for manufacturing chemicals and products
- performing tests throughout stages of production to determine degree of control over variables, including temperature, density, specific gravity, and pressure
- developing safety procedures to be employed
- preparing estimates of production costs and production progress reports for management
- performing laboratory studies of steps in manufacture of new products and testing proposed process in small scale operation such as a pilot plant

This unit group includes:

- Chemical engineer
- Petrochemicals engineer
- Petroleum refining engineer

**2146 Mining Engineers, Metallurgists and Related Professionals**

Mining engineers, metallurgists and related professionals conduct research on and, design, develop and maintain commercial-scale methods of extracting metals from their ores, or minerals, water, oil or gas from the earth and of developing new alloys, ceramic and other materials, or study and advise on mining or metallurgical aspects of particular materials, products or processes.

Tasks include:

- determining the location and planning the extraction of coal, metallic ores, non-metallic minerals, and building materials, such as stone and gravel
- determining most suitable methods of efficient mining and extraction, types of machinery to be used, planning layout and directing construction of shafts and tunnels
- determining drilling site and devising methods of controlling the flow of water, oil or gas from wells
- planning and directing storage, initial treatment and transportation of water, oil or gas

- conducting research, developing methods of extracting metals from their ores and advising on their application
- investigating properties of metals and alloys, developing new alloys and advising on and supervising technical aspects of metal and alloy manufacture and processing
- maintaining technical liaison and consultancy with other relevant specialists such as geologists and geophysicists
- examining deposits or mines to evaluate profitability

This unit group includes:

- Metallurgist
- Mining/coal engineer
- Mining/metal engineer
- Mining/petroleum and natural gas engineer

This unit group excludes:

- Geologists (2114)
- Geophysicists (2114)
- Petroleum refinery engineer (2145)

2149

### **Engineering Professionals Not Elsewhere Classified**

This unit group covers architects, engineers and related professionals not classified elsewhere in Minor Group 214 'Engineering Professionals (excluding electrotechnology)' and 215 'Electrotechnology engineers'. This group includes, for instance, those who conduct research, advise on or develop engineering procedures and solutions concerning workplace safety, biomedical engineering; optics; materials; nuclear power generation and explosives.

Tasks include:

- applying knowledge of engineering to the design, development, and evaluation of biological and health systems and products, such as artificial organs, prostheses, and instrumentation
- designing devices used in various medical procedures, imaging systems such as magnetic resonance imaging (MRI), and devices for automating insulin injections or controlling body functions
- designing components of optical instruments such as lenses, microscopes, telescopes, lasers, optical disc systems and other equipment that utilise the properties of light
- designing, testing, and coordinating the development of explosive ordnance material to meet military procurement specifications
- designing and overseeing construction and operation of nuclear reactors and power plants and nuclear fuels reprocessing and reclamation systems
- designing and developing nuclear equipment such as reactor cores, radiation shielding, and associated instrumentation and control mechanisms
- assessing damage and providing calculations for marine salvage operations
- studying and advising on engineering aspects of particular manufacturing processes, such as those related to glass, ceramics, textiles, leather products, wood, and printing

- providing security audit, review and security risk assessment services to clients and recommending security solutions/designs to existing and new structural development projects (public and private facilities)
- developing and conducting security training

This unit group includes:

- Biomedical engineer
- Materials engineer
- Industrial safety engineer
- Quantity surveyor
- Food and drink technologist
- Optical Engineer (including laser engineer)
- Safety and security consultant

This unit group excludes:

- Industrial and production engineer (2141)
- Environmental engineer (2143)
- Surveyor (2165)

2151

### **Electrical Engineers**

Electrical engineers conduct research and advise on, design, and direct the construction and operation of electrical systems, components, motors and equipment, and advise on and direct their functioning, maintenance and repair, or study and advise on technological aspects of electrical engineering materials, products and processes.

Tasks include:

- advising on and designing power stations and systems which generate , transmit and distribute electrical power
- supervising, controlling and monitoring the operation of electrical generation, transmission and distribution systems
- advising on and designing systems for electrical motors, electrical traction and other equipment, or electrical domestic appliances
- specifying electrical installation and application in industrial and other buildings and objects
- establishing control standards and procedures to monitor performance and safety of electrical generating and distribution systems, motors and equipment
- determining manufacturing methods for electrical systems, as well as maintenance and repair of existing electrical systems, motors and equipment

This unit group includes:

- Power generation and distribution engineer
- Electrical engineer
- Lift engineer

This unit group excludes:

- Electronics engineer (2152)
- Telecommunications engineer (2153)

**2152 Electronics Engineers**

Electronics engineers conduct research on, design, and direct the construction functioning, maintenance and repair of electronic systems and study and advise on technological aspects of electronic engineering materials, products or processes.

Tasks include:

- advising on and designing electronic devices or components, circuits, semi-conductors, and embedded systems
- specifying production or installation methods, materials and quality standards and directing production or installation work of electronic products and embedded systems
- establishing control standards and procedures to ensure efficient functioning and safety of electronic systems, motors and equipment
- organising and directing maintenance and repair of existing electronic systems, and equipment
- designing electronic circuits and components for use in fields such as aerospace guidance and propulsion control, acoustics, or instruments and controls
- researching and advising on radar, telemetry and remote control systems, microwaves and other electronic equipment
- designing and developing signal processing algorithms and implementing these through appropriate choice of hardware and software
- developing apparatus and procedures to test electronic components, circuits and systems

This unit group includes:

- Computer hardware engineer
- Electronics engineer
- Instrumentation engineer
- Embedded systems engineer

This unit group excludes:

- Telecommunications engineer (2153)
- Software engineer (2512)

**2153 Telecommunications Engineers**

Telecommunications engineers conduct research and advise on, design, and direct the construction of the functioning, maintenance and repairs of telecommunication systems and equipment. They study and advise on technological aspects of telecommunication engineering materials, products or processes.

Tasks include:

- advising on and designing telecommunications devices or components, systems, equipment and distribution centres
- specifying production or installation methods, materials, quality and safety standards and directing production or installation work of telecommunications products and systems



- organising and directing maintenance and repair of existing telecommunication systems, motors and equipment
- researching and advising on telecommunications equipment
- planning and designing communications networks based on wired, fibre optical and wireless communication media
- designing telecommunications networks and radio and television distribution systems, including both cable and over the air

This unit group includes:

- Broadcast engineer
- Telecommunications engineer
- Telephone engineer

This unit group excludes:

- Electronics engineer (2152)

2161

### **Building Architects**

Building architects design commercial, industrial, institutional, residential and recreational buildings and plan and monitor their construction, maintenance and rehabilitation.

Tasks include:

- developing new or improved architectural theories and methods
- inspecting sites and consulting clients, management and other stakeholders to determine type, style and size of proposed buildings and alterations to existing buildings
- providing information regarding designs, materials and estimated building times
- preparing project documentation, including sketches and scale drawings, and integrating structural, mechanical and aesthetic elements in final designs
- writing specifications and contract documents for use by builders and calling tenders on behalf of clients
- making necessary contacts to ensure feasibility of projects regarding style, cost, timing, and compliance with regulations
- identifying and finding best solutions for problems regarding function and quality of interior environments of buildings and making necessary designs, drawings and plans
- monitoring construction or rehabilitation work to ensure compliance with specifications and quality standards
- maintaining technical liaison and consultancy with other relevant specialists

This unit group includes:

- Building architect

This unit group excludes:

- Landscape architect (2162)
- Interior designer (3432)
- Town planner (2164)

**2162 Landscape Architects**

Landscape architects plan and design landscapes and open spaces for projects such as, parks, schools, institutions, roads, external areas for commercial, industrial and residential sites. They also plan and monitor their construction, maintenance and rehabilitation.

Tasks include:

- developing new or improved theories and methods in landscape architecture
- inspecting sites and consulting clients, management and other stakeholders to determine type, style and size of proposed buildings, parks, roads and other open spaces
- compiling and analysing site and community data about geographical and ecological features, landforms, soils, vegetation, site hydrology, visual characteristics and human-made structures, to formulate land use and development recommendations, and for preparing environmental impact statements
- preparing reports, site plans, working drawings, specifications and cost estimates for land development, showing location and details of proposals, including ground modelling, structures, vegetation and access
- writing specifications and contract documents for use by builders and civil engineering contractors and calling tenders on behalf of clients
- making necessary contacts to ensure feasibility of projects regarding style, cost, timing and compliance with regulations
- identifying and finding best solutions for problems regarding function and quality of exterior environments and making necessary designs, drawings and plans
- monitoring construction or rehabilitation work to ensure compliance with specifications and quality standards
- maintaining technical liaison and consultancy with other relevant specialists

This unit group includes:

- Landscape architect

This unit group excludes:

- Building architect (2161)
- Town planner (2164)
- Urban planner (2164)

**2163 Fashion, Garment and Product Designers**

Fashion, garment and product designers design and develop products for manufacture and prepare designs and specifications of products for mass, batch and one-off production.

Tasks include:

- determining the objectives and constraints of the design brief by consulting with clients and stakeholders

- formulating design concepts for clothing, textiles, industrial, commercial and consumer products, and jewellery harmonising aesthetic considerations with technical, functional and production requirements
- preparing sketches, diagrams, illustrations, plans, samples and models to communicate design concepts
- negotiating design solutions with clients, management, and sales and manufacturing staff
- selecting, specifying and recommending functional and aesthetic materials, production methods and finishes for manufacture
- detailing and documenting the selected design for production
- preparing and commissioning prototypes and samples
- supervising the preparation of patterns, programmes and tooling, and the manufacturing process

This unit group includes:

- Clothes designer
- Fashion and garment designer
- Furniture designer
- Industrial product designer
- Package designer
- Textile designer
- Commercial product designer
- Jewellery designer

This unit group excludes:

- Engine designer (2144)
- Building architect (2161)
- Landscape architect (2162)

2164

### **Town and Related Planners**

Town and related planners develop and implement plans and policies for the controlled use of urban and rural land. They conduct research and provide advice on economic, environmental and social factors affecting land use.

Tasks include:

- planning layout and coordinating development of urban areas
- compiling and analysing data on economic, legal, political, cultural, demographic, sociological, physical and environmental factors affecting land use
- conferring with government authorities, communities and specialists in fields such as architecture, planning, social science the environment and the law
- devising and recommending use and development of land, and presenting narrative and graphic plans, programmes and designs to groups and individuals
- advising governments, companies and communities on urban and regional planning issues and proposals
- reviewing and evaluating environmental impact reports
- planning layout and coordinating development of urban areas
- planning and the development of land areas for parks, schools, institutions, airports, roadways and related projects, and for commercial, industrial and

residential sites

- planning and advising on routing and control of road traffic and public transportation systems for efficiency and safety

This unit group includes:

- Land planner
- Traffic planner
- Urban planner

This unit group excludes:

- Building architect (2161)
- Landscape architect (2162)

## 2165 **Surveyors and Cartographers**

Surveyors and cartographers determine the exact position of, or prepare and revise digital, graphic and pictorial maps, charts other visual representation of, natural and constructed features and boundaries of land, seas, underground areas and celestial bodies, applying scientific and mathematical principles.

Tasks include:

- surveying, measuring and describing land surfaces, mines, underground surfaces, sea, river and lake beds
- noting exact position of various features and recording survey data in digital form
- making charts and maps to be used in determining navigable waters and channels and in planning construction of marine structures
- planning and conducting aerial photographic surveys
- designing, compiling and revising maps and charts using aerial and other photographs, satellite imagery, survey documents and data, existing maps and records, reports and statistics
- undertaking research and development of surveying and photogrammetric measurement systems, cadastral systems and land information systems
- studying and advising on technical, aesthetic and economic aspects of map production
- maintaining technical liaison and consultancy with other relevant specialists

This unit group includes:

- Aerial surveyor
- Cadastral surveyor
- Cartographer
- Hydrographic surveyor
- Land surveyor
- Photogrammetrist

This unit group excludes:

- Marine surveyor (3115)
- Quantity surveyor (2149)

**2166 Graphic and Multimedia Designers and Artists**

Graphic and multimedia designers and artists design information content and develop user interfaces for a variety of communications platform (e.g. visual, audio publication and display through print, mobile, web, film, electronic, digital and other forms of visual and audio media. They create special effects, animation, or other visual images for use in computer games, movies, music videos, print media and advertisements.

Tasks include:

- determining the objectives and constraints of the design brief by consulting with clients and stakeholders
- undertaking research and analysing functional communication requirements
- working directly with customers and prospects to design end-to-end experiences using participatory and iterative design techniques (including observational studies, customer interviews, task analysis, persona creation, storyboarding, scenario building, user flows, use cases, usability testing), as well as other forms of qualitative and quantitative research to uncover insights, learn about user behaviour and verify design concepts
- formulating design concepts for the subject to be communicated
- communicating design concepts through storytelling and rapid prototyping methods, ranging from paper sketching to digital prototyping (e.g. diagrams, illustrations, layouts)
- preparing sketches, diagrams, illustrations and layouts to communicate design concepts
- designing complex graphics and animation to satisfy functional, aesthetic and creative requirements of the design brief
- creating two-dimensional and three-dimensional images depicting objects in motion or illustrating a process, using computer animation or modelling programmes
- negotiating design solutions with clients, management, sales and production staff
- selecting, specifying or recommending functional and aesthetic materials and media for publication, delivery or display
- detailing and documenting the selected design for production
- supervising or carrying out production in the chosen media

This unit group includes:

- Animator
- Graphic artist
- Graphic designer
- Games designer
- Multimedia artist
- Interaction/User experience designer

This unit group excludes:

- Interior designer (3432)
- Multimedia developer (2512)
- Computer games developer (2512)
- Multimedia programmer (2512)

**2171 Ship Engineers and Related Professionals**

Ship engineers and related professionals command and control the operation of mechanical, electrical and electronic equipment, in order to navigate marine vessels for transporting passengers, mail and freight. They also plan and research to improve existing procedures or existing stock of knowledge.

Tasks include:

- developing, adapting and overseeing the implementation of navigation plans through using complex navigation aids and clear knowledge of local conditions
- adapting departmental plans and priorities to address resource and operational challenges
- planning and arranging all technical maintenance and repairs needed on the vessels
- carrying out vessel inspections and monitor the ship's conditions
- ensuring compliance of vessels with regulations and standards
- researching and implementing new procedures to improve daily operations

This unit group includes:

- Chief engineer (ship)
- Ship captain
- Marine superintendent engineer
- Marine superintendent (deck)

**2172 Aircraft Pilots and Related Professionals**

Aircraft pilots and related professionals command and control the operation of mechanical, electrical and electronic equipment, in order to navigate aircraft for transporting passengers, mail and freight and perform related pre-flight and in-flight tasks. They also plan and research to improve existing procedures or existing stock of knowledge.

Tasks include:

- applying knowledge of principles and practices of flying in order to identify and solve problems arising in the course of their work
  - preparing and submitting flight plan or examining standard flight plan flying and navigating aircraft in accordance with established control and operating procedures
  - controlling the operation of mechanical, electrical and electronic equipment and ensuring that all instruments and controls work properly
  - examining maintenance records and conducting inspections to ensure that aircraft are mechanically sound, maintenance has been performed and that all equipment is operational
  - signing necessary certificates and maintaining official records of flight
  - obtaining briefings and clearances before flights and maintaining contact with air traffic or flight control during flight
- This unit group includes: Pilot (aircraft)
  - Flight engineer
  - Flight navigator
  - Flying instructor (except air force)
  - Helicopter pilot (air transport)

**2211 Generalist Medical Practitioners**

Generalist medical practitioners diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans through application of the principles and procedures of modern medicine. They do not limit their practice to certain disease categories or methods of treatment, and may assume responsibility for the provision of continuing and comprehensive medical care to, and the maintenance of general health of, individuals, families and communities. Medical graduates undergoing housemanship are also classified here

Tasks include:

- conducting physical examinations of patients and interviewing them and their families to determine their health status
- ordering laboratory tests, X-rays and other diagnostic procedures and analysing findings to determine the nature of disorders or illnesses
- providing continuing medical care for patients including prescribing, administering, counselling on and monitoring curative treatments and preventive measures
- performing minor surgery and other clinical procedures
- advising individuals, families and communities on health, nutrition and lifestyle which aid prevention or treatment of disease and disorders
- providing referrals to patients and families for specialised care in hospitals, rehabilitation centres or other types of healthcare centres
- identifying, managing and providing referrals for complications before, during and after childbirth
- recording patients' medical information and history and exchanging information with specialist practitioners and other health workers as required for continuing medical care
- reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements
- planning and participating in programmes designed to prevent the occurrence and spread of common diseases

This unit group includes:

- General practitioner
- Medical doctor (general)
- Physician (general)

This unit group excludes:

- Specialist medical practitioner (2212, 2213, 2214, 2215)
- Surgeon (2213)
- Psychiatrist (2212)

**2212 Specialist Medical Practitioners (Medical)**

Specialist medical practitioners (medical) diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans, using specialised testing, diagnostic, medical, physical and psychiatric techniques, through application of the principles and procedures of modern medicine. They specialise in certain disease categories, types of patient or methods of treatment and may conduct medical education and research in their chosen areas of specialisation.

Tasks include:

- conducting physical examinations of patients and interviewing them and their families to determine their health status
- considering medical information provided by a referring doctor or other healthcare provider
- ordering specialised diagnostic tests to determine the nature of disorders or illnesses
- prescribing, administering and monitoring patients' responses to treatments, medications, anaesthetics, psychotherapies, physical rehabilitation programmes and other preventive and curative measures
- recording patients' medical information and exchanging information with other health professionals to ensure the provision of comprehensive care
- reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements
- providing information to patients and families about preventive measures, treatment and care for specific ailments
- conducting research into specific human disorders and illnesses and preventive or curative methods and disseminating the findings such as through scientific reports
- planning and participating in programmes designed to prevent the occurrence and spread of specific diseases

This unit group includes:

- Cardiologist
- Dermatologist
- Paediatrician
- Psychiatrist
- Respiratory physician
- Internal medicine physician

This unit group excludes:

- Anaesthesiologist (2214)
- Emergency physician (2214)
- Gynaecologist (2214)
- Medical scientist (2134)
- Obstetrician (2214)
- Ophthalmologist (2214)
- Radiologist (2214)
- General practitioner (2211)
- Dental practitioner (2261)
- Dental surgeon (2261)
- Clinical psychologist (2634)
- Surgeon (2213)



**2213 Specialist Medical Practitioners (Surgical)**

Specialist medical practitioners (surgical) diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans, using surgical techniques, through application of the principles and procedures of modern medicine. They specialise in certain disease categories, types of patient or methods of treatment and may conduct medical education and research in their chosen areas of specialisation.

Tasks include:

- considering medical information provided by a referring doctor or other healthcare provider
- ordering specialised diagnostic tests to determine the nature of disorders or illnesses
- prescribing, administering and monitoring patients' responses to surgical treatments
- performing surgery of a general or specialised nature
- managing complications before, during and after surgery
- recording patients' medical information and exchanging information with other health professionals to ensure the provision of comprehensive care
- reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements
- providing information to patients and families about preventive measures, treatment and care for specific ailments
- conducting research into specific human disorders and illnesses and preventive or curative methods and disseminating the findings such as through scientific reports
- planning and participating in programmes designed to prevent the occurrence and spread of specific diseases

This unit group includes:

- General surgeon
- Cardiothoracic surgeon
- Hand surgeon
- Orthopaedic surgeon
- Plastic surgeon
- Urologist

This unit group excludes:

- General practitioner (2211)
- Dental surgeon (2261)
- Ear, nose, throat (ENT) specialist (2214)

**2214/5 Specialist Medical Practitioners (Other Specialisations) – I  
Specialist Medical Practitioners (Other Specialisations) – II (Con'td)**

Specialist medical practitioners (other specialisations) diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans, using specialised testing, diagnostic, medical, surgical, physical and psychiatric techniques, through application of the principles and procedures of modern medicine. They specialise in certain disease categories, types of patient or methods of treatment and may conduct medical education and research in their chosen areas of specialisation.

Tasks include:

- conducting physical examinations of patients and interviewing them and their families to determine their health status
- considering medical information provided by a referring doctor or other healthcare provider
- ordering specialised diagnostic tests to determine the nature of disorders or illnesses
- prescribing, administering and monitoring patients' responses to treatments, medications, anaesthetics, psychotherapies, physical rehabilitation programmes and other preventive and curative measures
- performing surgery of a specialised nature
- managing complications before, during and after childbirth
- recording patients' medical information and exchanging information with other health professionals to ensure the provision of comprehensive care
- reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements
- providing information to patients and families about preventive measures, treatment and care for specific ailments
- performing autopsies to determine cause of death
- conducting research into specific human disorders and illnesses and preventive or curative methods and disseminating the findings such as through scientific reports
- planning and participating in programmes designed to prevent the occurrence and spread of specific diseases

This unit group includes:

- Anaesthesiologist
- Emergency physician
- Gynaecologist
- Obstetrician
- Ophthalmologist
- Pathologist
- Ear, nose, throat (ENT) specialist
- Radiation oncologist

This unit group excludes:

- Cardiologist (2212)
- Paediatrician (2212)
- General practitioner (2211)
- Dental surgeon (2261)
- Clinical psychologist (2634)
- Internal medicine physician (2212)
- Psychiatrist (2212)

**2220 Nursing Professionals**

Nursing professionals provide treatment, support and care services for people who are in need of nursing care due to the effects of ageing, injury, illness or other physical or mental impairment, or potential risks to health. They assume responsibility for the planning and management of the care of patients, including the supervision of other health care workers, working autonomously or in teams with medical doctors and others in the practical application of preventive and curative measures.

Tasks include:

- planning, providing and evaluating nursing care for patients according to the practice and standards of modern nursing
- coordinating the care of patients in consultation with other health professionals and members of health teams
- developing and implementing care plans for the biological, social, and psychological treatment of patients in collaboration with other health professionals
- planning and providing personal care, treatments and therapies including administering medications, and monitoring responses to treatment or care plan
- cleaning wounds and applying surgical dressings and bandages
- monitoring pain and discomfort experienced by patients and alleviating pain using a variety of therapies, including the use of pain-killing drugs
- planning and participating in health education programmes, health promotion and nurse education activities in clinical and community settings
- answering questions from patients and families and providing information about prevention of ill-health, treatment and care
- supervising and coordinating the work of other nursing, health and personal care workers
- conducting research on nursing practices and procedures and disseminating findings such as through scientific papers and reports.

This unit group includes:

- Clinical nurse
- Nurse educator
- Registered nurse

This unit group excludes:

- Nursing aide (clinic, hospital) (5320)
- Healthcare assistant (5320)
- Veterinary nurse (3240)
- Enrolled nurse (3220)
- Assistant nurse (3220)

**2230 Traditional and Complementary Medicine Professionals**

Traditional and complementary medicine professionals maintain health and prevent, diagnose and treat illness, disease, injury, and other physical and mental impairments in humans by applying knowledge, skills and practices acquired through extensive study of theories, beliefs and experiences, originating in specific cultures.

Tasks include:

- conducting physical examinations of patients and interviewing them and their families to determine their health status
- developing and implementing treatment plans using applications such as acupuncture, homoeopathic and herbal medicine
- evaluating and documenting patients' progress through treatment plans
- providing health, nutrition and lifestyle advice
- prescribing natural medicines, such as herbal, mineral and animal extracts, to stimulate the body's capacity for self-healing
- exchanging information about patients with other healthcare workers as needed to ensure continuing and comprehensive healthcare
- conducting research into traditional and complementary medicines and treatments and disseminating findings such as through scientific papers and reports

This unit group includes:

- Acupuncturist
- Traditional Chinese medicine practitioner

This unit group excludes:

- Chiropractor (2269)
- Osteopath (2269)

Notes

Occupations in traditional and complementary medicine whose practice requires an extensive understanding of the benefits and applications of traditional and complementary therapies, developed as the result of extended formal study of these techniques as well as human anatomy and elements of modern medicine, are classified in Unit Group 2230 'Traditional and complementary medicine professionals'. Those whose practice requires a less extensive understanding based on relatively short periods of formal or informal education and training, or on knowledge passed on informally from generation to generation are included in Unit Group 3230 'Traditional and complementary medicine associate professionals'. Practitioners working in the singular application of approaches to herbal medicines, spiritual therapies or manual therapeutic techniques are excluded from Unit Group 2230.

2250

### **Veterinarians**

Veterinarians diagnose, prevent and treat diseases, injuries and dysfunctions of animals. They may provide care to a wide range of animals or specialise in the treatment of a particular animal group or in a particular specialty area, or provide professional services to commercial firms producing biological and pharmaceutical products.

Tasks include:

- determining the presence and nature of abnormal conditions by physical examination, laboratory testing and through diagnostic imaging techniques including radiography and ultrasound
- treating animals medically and surgically, and administering and prescribing drugs, analgesics, and general and local anaesthetics
- performing surgery, dressing wounds and setting broken bones

- rendering obstetric and dental services to animals
- participating in programmes designed to prevent the occurrence and spread of animal diseases
- inoculating animals against, and testing for, infectious diseases and notifying authorities of outbreaks of infectious animal diseases
- performing autopsies to determine cause of death
- advising clients on health, nutrition and feeding, hygiene, breeding and care of animals
- providing euthanasia services for animals

This unit group includes:

- Animal pathologist
- Public health veterinarian
- Veterinarian
- Veterinary surgeon

2261

### **Dentists**

Dentists diagnose, treat and prevent diseases, injuries and abnormalities of the teeth, mouth, jaws and associated tissues by applying the principles and procedures of modern dentistry. They use a broad range of specialised diagnostic, surgical and other techniques to promote and restore oral health.

Tasks include:

- diagnosing diseases, injuries, irregularities and malformations of teeth and associated structures in the mouth and jaw using a range of methods such as radiographs, salivary tests and medical histories
- providing preventative oral healthcare such as periodontal treatments, fluoride applications and oral health promotion
- providing restorative oral care such as implants, complex crown and bridge restorations, and orthodontics, and repairing damaged and decayed teeth
- providing surgical treatments such as extraction of teeth, biopsy of tissue, and performing orthodontic treatment
- measuring and taking impressions of patients' jaws and teeth in order to determine the shape and size of dental prostheses
- designing, making, and fitting prosthodontic appliances such as space maintainers, bridges, and dentures, or writing fabrication instructions or prescriptions for dental prosthetic technicians
- restoring oral function with removable and fixed oral prostheses
- assisting in diagnosing general diseases having oral manifestations such as diabetes
- educating patients to take care of their mouth and teeth
- supervising dental hygienists, dental assistants and other staff

This unit group includes:

- Oral surgeon
- Dentist
- Orthodontist

**2262 Pharmacists**

Pharmacists store, preserve, compound, and dispense medicinal products and counsel on the proper use and adverse effects of drugs and medicines following prescriptions issued by medical doctors and other health professionals. They contribute to researching, testing preparing, prescribing and monitoring medicinal therapies for optimising human health.

Tasks include:

- receiving prescriptions, checking patients' medicine histories, and ensuring proper dosage and methods of administration and drug compatibility before dispensing
- preparing or supervising the preparation and labelling of liquid medicines, ointments, powders, tablets and other medications to fill prescriptions
- providing information and advice to prescribers and clients regarding drug interactions, incompatibility and contra-indications, side effects, dosage and proper medication storage
- collaborating with other healthcare professionals to plan, monitor, review, and evaluate the quality and effectiveness of the medicine therapy of individual patients, and the effectiveness of particular drugs or therapies
- maintaining prescription files and recording issue of narcotics, poisons and habit-forming drugs
- storing and preserving vaccines, serums and other drugs subject to deterioration; supplying non-prescription medicines, and diagnostic and therapeutic aids
- supervising and coordinating the work of pharmaceutical technicians, and pharmacy sales assistants
- conducting research to develop and improve pharmaceuticals, cosmetics and related chemical products
- conferring with chemists, engineering professionals and other professionals about manufacturing techniques and ingredients
- testing and analysing drugs to determine their identity, purity and strength in relation to specified standards
- evaluating labels, packaging and advertising of drug products
- developing information and risks of particular drugs

This unit group includes:

- Pharmacist (patient care)
- Druggist
- Hospital pharmacist
- Retail pharmacist
- Specialist pharmacist

This unit group excludes:

- Pharmacologist (2134)
- Pharmacy technician (3213)

**2263 Environmental and Occupational Health and Hygiene Professionals**

Environmental and occupational health and hygiene professionals assess, plan and implement programmes to recognise, monitor and control environmental factors that can potentially affect human health, to ensure safe and healthy working conditions, and to prevent disease or injury caused by chemical, physical, radiological and biological agents or ergonomic factors.

Tasks include:

- developing, implementing and reviewing programmes and policies to promote environmental and occupational health
- preparing and implementing plans and strategies for the safe, economic and suitable disposal of commercial, industrial, medical and household wastes
- implementing prevention programmes and strategies for communicable diseases, food safety, waste water treatment and disposal systems, recreation and domestic water quality, contaminated and hazardous substances
- identifying, reporting and documenting hazards, and assessing and controlling risks in the environment and workplace and advising on compliance with relevant law and regulations
- developing, implementing and monitoring programmes to minimise workplace and environmental pollution involving chemical, physical and biological hazards
- prescribing methods to prevent, eliminate, control, or reduce the exposure of workers, patients, the public and/or the environment to radiological and other hazards
- promoting ergonomic principles within the workplace such as matching furniture, equipment and work activities to the needs of employees
- providing education, information, training, and advice to persons at all levels on aspects of occupational hygiene and environmental health
- recording and investigating injuries and equipment damage, and reporting safety performance
- coordinating arrangements for the compensation, rehabilitation and return to work of injured workers

This unit group includes:

- Environmental officer (public health)
- Occupational health and professional

This unit group excludes:

- Environmental protection professional (2133)
- Occupational therapist (2268)
- Environmental public health inspector (3257)

**2264 Physiotherapists and Related Professionals**

Physiotherapists and related professionals assess, plan and implement rehabilitative programmes that improve or restore human motor functions, maximise movement ability, relieve pain syndromes, and treat or prevent physical challenges associated with injuries, diseases and other impairments. They apply a broad range of physical therapies and techniques such as movement, ultrasound, heating, laser and other techniques.

Tasks include:

- administering muscle, nerve, joint and functional ability tests to identify and assess physical problems of patients
- establishing treatment goals with patients and designing treatment programmes to address patients' problems
- treating patients to reduce pain, improve circulation, strengthen muscles, improve cardiothoracic, cardiovascular and respiratory functions, restore joint mobility, and improve balance and coordination
- using the therapeutic properties of exercise, heat, cold, massage, manipulation, hydrotherapy, electrotherapy, ultraviolet and infra-red light and ultrasound in the treatment of patients
- reviewing, continually monitoring, assessing and evaluating programmes and treatments
- instructing patients and their families in procedures to be continued at home
- recording information on patients' health status and responses to treatment in medical records keeping systems, and sharing information with other health professionals as required to ensure continuing and comprehensive care
- developing and implementing programmes for screening and prevention of common physical ailments and disorders

This unit group includes:

- Physical therapist
- Physiotherapist
- Sports physiotherapist

This unit group excludes:

- Occupational therapist (2268)
- Podiatrist (2269)
- Chiropractor (2269)
- Osteopath (2269)
- Massage therapist (3255)
- Physiotherapy technician (3255)

2265

### **Dietitians and Nutritionists**

Dietitians and nutritionists assess, plan and implement programmes to enhance the impact of food and nutrition on human health.

Tasks include:

- instructing individuals, families and communities on nutrition, the planning of diets and preparation of food to maximise health benefits and reduce potential risks to health
- planning diets and menus, supervising the preparation and serving of meals and monitoring food intake and quality to provide nutritional care in settings offering food services
- compiling and assessing data relating to health and nutritional status of individuals, groups and communities based on nutritional values of food served or consumed
- planning and conducting nutrition assessments, intervention programmes, and education and training to improve nutritional levels among individuals and communities



- consulting with other health professionals and care providers to manage the dietary and nutritional needs of patients
- developing and evaluating food and nutrition products to meet nutritional requirements
- conducting research on nutrition and disseminating the findings such as at scientific conferences

This unit group includes:

- Dietitian
- Sports dietitian
- Sports nutritionist
- Public health nutritionist

## 2266 **Audiologists and Speech Therapists**

Audiologists and speech therapists diagnose, manage and treat physical disorders affecting human hearing, speech, communication and swallowing. They prescribe corrective devices or rehabilitative therapies for hearing loss, speech disorders, and related sensory and neural problems and provide counseling on hearing safety and communication performance.

Tasks include:

- evaluating hearing and speech/language disorders to determine diagnoses and courses of treatment
- administering hearing or speech/language evaluations, tests or examinations to patients to collect information on type and degree of impairment, using specialised instruments and electronic equipment
- interpreting audiometric test results alongside other medical, social and behavioural diagnostic data
- planning, directing and participating in counselling, speech, reading and other rehabilitation programmes
- recommending hearing aids and other assistive devices according to clients' needs and instructing them in their use
- planning and conducting programmes of remedial exercise to correct disorders such as stuttering and abnormal articulation
- counselling and guiding hearing and/or language-handicapped individuals, their families, teachers and employers
- referring clients to additional medical or educational services if needed

This unit group includes:

- Audiologist
- Language therapist
- Speech therapist
- Speech pathologist

## 2267 **Optometrists**

Optometrists provide diagnosis, management and treatment services for disorders of the eyes and visual system. They counsel on eye care and prescribe optical aids or other therapies for visual disturbance.

Tasks include:

- examining patients' eyes and setting tests to determine the nature and extent of vision problems and abnormalities
- assessing ocular health and visual function by measuring visual acuity and refractive error, and testing the function of visual pathways, visual fields, eye movements, freedom of vision and intraocular pressure, and performing other tests using special eye test equipment
- detecting, diagnosing and managing eye disease, and prescribing medications for the treatment of eye disease
- consulting with and referring patients to ophthalmologist or other health care practitioner if additional medical treatment is determined necessary
- diagnosing eye movement disorders and defects of binocular function
- prescribing lenses, contact lenses and low vision aids and checking suitability and comfort
- prescribing exercises to coordinate movement and focusing of eyes
- managing programmes for eye movement disorders, and instructing and counselling patients in the use of corrective techniques and eye exercises
- advising on visual health matters such as contact lens care, vision care for the elderly, optics, visual ergonomics and occupational and industrial eye safety

This unit group includes:

- Optometrist
- Orthoptist

This unit group excludes:

- Ophthalmologist (2214)
- Optician (3254)

2268

### **Occupational Therapists**

Occupational therapists help people of all ages to improve their ability to perform tasks in their daily living and working environments. They work with individuals who have conditions that are physically, developmentally, socially or emotionally disabling. They also help them to develop, recover, or maintain daily living and work skills. Occupational therapists help clients not only to improve their basic motor functions and reasoning abilities, but also to compensate for permanent loss of function.

Tasks include:

- assessing patients or clients to determine the nature of the disorder, illness or problem by questioning, examining and observing
- developing and implementing treatment plans and evaluating and documenting patients' progress through treatment plans
- assessing functional limitations of people resulting from illnesses and disabilities, and providing therapy to enable people to perform their daily activities and occupations
- assessing clients' emotional, psychological, developmental and physical capabilities using clinical observations and standardised tests
- assessing clients' functional potential in their home, leisure, work and school environments and recommending environmental adaptations to maximise their performance

- planning and directing programmes through the use of vocational, remedial, social, artistic and educational activities on an individual and group basis

This unit group includes:

- Occupational therapist
- Therapist for orientation of the blind

2269

### **Other Health Professionals Not Elsewhere Classified**

This unit group covers other health professionals not classified elsewhere in Sub-Major Group 22 'Health professionals'.

Tasks include:

- interviewing patients and conducting diagnostic tests to determine their health status, functional limitations, and the nature of physical or mental disorders, illnesses or other health problems
- assessing patients or clients to determine the nature of the disorder, illness or problem by questioning, examining and observing
- developing and implementing treatment plans and evaluating and documenting patients' progress through treatment plans
- assessing health of patients, determining need for assistance, and assessing specialised needs and factors affecting patients' conditions
- administering therapeutic care and treatment to patients, including through application of manual and physical chiropractic and osteopathic techniques
- identifying and prescribing treatment for conditions affecting the foot, ankle and related structure of the leg due to illness, disease or other physical impairment, and prescribing corrective footwear and advising on foot care to manage foot ailments
- assessing patient condition and determining appropriate modification of imaging techniques independently
- performing limited minimally invasive procedures (e.g. intravenous cannulation, contrast/radioisotope/radiotracer administration, insertion of rectal enema tube) with appropriate patient assessment for risk factors and contraindications and applying mitigating measures to prevent and/or manage associated complications
- evaluating and recommending appropriate patient's set-up or immobilisation devices for simulation and treatment procedures
- designing of optimal treatment plan specific to each patient's anatomy and diagnosis
- calculating, measuring and recording radiation dosage or radiopharmaceuticals received, used and disposed, using computer and following prescription
- detecting and mapping radiopharmaceuticals in patients' bodies, using a camera to produce photographic or computer images
- administering radiopharmaceuticals or radiation to patients to detect or treat diseases, using radioisotope equipment
- disposing of radioactive materials and storing radiopharmaceuticals, following radiation safety procedures

This unit group includes:

- Osteopath
- Chiropractor
- Podiatrist
- Medical diagnostic radiographer
- Radiation therapist

This unit group excludes:

- Paramedic (3259)

### 2310 **University, Polytechnic and Higher Education Teachers**

University, polytechnic and higher education teachers prepare and deliver lectures and conduct tutorials in one or more subjects within a prescribed course of study at a university, polytechnic or other higher educational institution. They conduct research, and prepare scholarly papers and books.

Tasks include:

- designing and modifying curricula and preparing courses of study in accordance with requirements
- preparing and delivering lectures and conducting tutorials, seminars and laboratory experiments
- stimulating discussion and independent thought among students
- supervising, where appropriate, experimental and practical work undertaken by students
- administering, evaluating and marking examination papers and tests
- directing research of students or other members of department
- researching into and developing concepts, theories and operational methods for application in industrial and other fields
- preparing scholarly books, papers or articles
- participating in departmental and faculty meetings and in conferences and seminars

This unit group includes:

- University lecturer
- University teacher
- Polytechnic lecturer

This unit group excludes:

- Dean (1345)
- Higher education faculty head (1345)
- Vocational education teacher (2330)

### 2320 **Junior College and Pre-university Education Teachers**

Junior college and pre-university education teachers teach one or more subjects at the junior college or pre-university level.

Tasks include:

- designing and modifying curricula and preparing educational courses of study

- in accordance with curriculum guidelines
- establishing and enforcing rules for behavior and procedures for maintaining order among students
  - preparing and giving lessons, discussions, and demonstrations in one or more subjects
  - establishing clear objectives for all lessons, units, and projects and communicating those objectives to students
  - preparing materials and classrooms for class activities
  - adapting teaching methods and instructional materials to meet students' varying needs and interests
  - observing and evaluating students' performance and behaviour
  - preparing, administering and marking tests, assignments and examinations to evaluate pupils' progress
  - preparing reports about pupils' work and conferring with other teachers and parents
  - participating in meetings concerning the school's educational or organisational policies
  - planning, organising and participating in school activities such as excursions, sporting events and concerts

This unit group includes:

- Integrated Programme (IP) Year 5-6 teacher
- Junior college teacher
- Pre-university teacher

This unit group excludes:

- School cluster superintendent (1345)

2330

### **Vocational Education Teachers and Trainers**

Vocational education teachers and trainers teach or instruct vocational or occupational subjects in adult and further education institutions and to senior students in secondary schools and colleges. They prepare students for employment in specific occupations or occupational areas for which university or higher education is not normally required.

Tasks include:

- developing curricula and planning course content and methods of instruction
- determining training needs of students or workers and liaising with individuals, industry and other education sectors to ensure provision of relevant education and training programmes
- presenting lectures and conducting discussions to increase students' knowledge and competence
- instructing and monitoring students in the use of tools, equipment and materials and the prevention of injury and damage
- observing and evaluating students' work to determine progress, provide feedback, and make suggestions for improvement
- administering oral, written or performance tests to measure progress, evaluate training effectiveness and assess competency

- preparing reports and maintaining records such as student grades, attendance rolls, and training activity details
- supervising independent or group projects, field placements, laboratory work, or other training
- providing individualised instruction and tutorial or remedial instruction

This unit group includes:

- Secretarial school teacher
- Vocational school teacher/trainer

## 2340 **Secondary Education Teachers**

Secondary education teachers teach one or more subjects at secondary school level.

Tasks include:

- designing and modifying curricula and preparing educational courses of study in accordance with curriculum guidelines
- establishing and enforcing rules for behavior and procedures for maintaining order among students
- preparing and giving lessons, discussions, and demonstrations in one or more subjects
- establishing clear objectives for all lessons, units, and projects and communicating those objectives to students
- preparing materials and classrooms for class activities
- adapting teaching methods and instructional materials to meet students' varying needs and interests
- observing and evaluating students' performance and behaviour
- preparing, administering and marking tests, assignments and examinations to evaluate pupils' progress
- preparing reports about pupils' work and conferring with other teachers and parents
- participating in meetings concerning the school's educational or organisational policies
- planning, organising and participating in school activities such as excursions, sporting events and concerts

This unit group includes:

- Integrated Programme (IP) Year 1-4 teacher
- Secondary school teacher
- Technical education teacher (secondary school)

This unit group excludes:

- School cluster superintendent (1345)

**2350 Primary School Teachers**

Primary school teachers teach a range of subjects at the primary school level.

Tasks include:

- preparing daily and longer term lesson plans in accordance with curriculum guidelines
- instructing children individually and in groups, using various teaching methods and materials (e.g. computers, books, games), adapting to children's varying needs
- maintaining discipline and good working habits in the classroom
- planning and conduct activities with the children such as sporting activities, concerts and excursions
- assigning and grading class work and homework
- preparing, administering, and grading tests and assignments to evaluate children's progress
- observing and evaluating children's performance and behaviour
- supervising children during classes and at other times in the school day, including the playground during breaks
- participating in staff meetings and other sessions, and conferring with other teachers concerning educational issues
- prepare for and attending parent meetings to discuss children's progress and problems

This unit group includes:

- Primary school teacher

This unit group excludes:

- Pre-primary education teacher (3610)
- Early childhood educators (3610)

**2361 Education Methods Specialists**

Education methods specialists conduct research and develop or advise on teaching methods, courses and aids. They review and examine teachers' work, the functioning of educational institutions and the results achieved and recommend changes and improvements.

Tasks include:

- researching into current developments in curricula, teaching methods and other educational practices, and advising on necessary changes and possible improvements
- evaluating and advising on contents of courses and methods of examination
- researching into audio-visual and other teaching aids and advising on, planning and organising their introduction in educational establishments
- documenting subjects and courses developed, and evaluating new courses
- providing ongoing professional development, training and consultative services to teachers

- organising and conducting workshops and conferences to train teachers in new programmes and methods
- developing the structure, content and objectives of new educational courses and programmes
- visiting schools periodically and conferring with administrative and teaching staff on questions relating to curricula, teaching methods, equipment and other matters
- visiting classrooms to observe teaching techniques and to evaluate teachers performance, and scholastic results obtained
- preparing reports and making recommendations to educational authorities concerning possible changes and improvements in curricula, teaching methods, and other matters

This unit group includes:

- Education methods specialist
- Teaching aids specialist
- Visual teaching aids specialist

This unit group excludes:

- Educational psychologist (2634)
- School counsellor (2635)

2362

### **Special Education Teachers**

Special education teachers teach physically or mentally handicapped children, young persons, or adults, or those with learning difficulties or other special needs. They promote the social, emotional, intellectual and physical development of their students.

Tasks include:

- assessing students' abilities and limitations with regard to intellectual, physical, social and emotional impairments, exceptional intellectual gifts, or other specific problems
- designing or modifying curricula and preparing and delivering programmes, lessons and activities adapted to students' abilities and needs
- giving instruction on an individual or group basis using special techniques or aids appropriate to students' needs
- employing special educational strategies and techniques during instruction to improve the development of sensory- and perceptual-motor skills, language, cognition, and memory
- establishing and enforcing rules for behaviour and policies and procedures to maintain order among students
- teaching academic subjects, and practical and self-help skills to students with hearing, sight and other impairments
- stimulating and developing students' confidence interests, abilities, manual skills and coordination
- conferring with other staff members to plan and schedule lessons for special needs students



- preparing and maintaining student data and other records and submitting reports
- administering various forms of assessment and evaluating progress of each student
- conferring with students, parents, head teacher and other relevant professionals involved in the students' care to develop individual educational plans designed to promote students' development

This unit group includes:

- Teacher of the mute
- Teacher of the mentally handicapped
- Teacher of the deaf
- Teacher of the blind

This unit group excludes:

- Vocational education teacher (2330)
- Secondary school teacher (2340)
- Primary school teacher (2350)

2369 **Other Teaching Professionals Not Elsewhere Classified**

This unit group covers teaching professionals not classified elsewhere in Sub-Major Group 23 'Teaching and training professionals'.

2411 **Accountants**

Accountants plan, organise and administer accounting systems for individuals and establishments. They examine and analyse the accounting and financial records of individuals and establishments to ensure accuracy and compliance with established accounting standards and procedures.

Tasks include:

- advising on, planning and installing budgetary, accounts controlling and other accounting policies and systems
- preparing and certifying financial statements for presentation to management, shareholders and statutory or other bodies
- preparing tax returns, advising on taxation problems and contesting disputed claims before tax officials
- preparing or reporting on profit forecasts and budgets
- conducting financial investigations in such matters as suspected fraud, insolvency and bankruptcy
- auditing accounts and bookkeeping records
- conducting investigations and advising management on financial aspects of productivity, stockholdings, sales, new products, etc.
- devising and controlling a system to determine unit cost of products and services

This unit group includes:

- Accountant
- Auditor

- Chartered accountant
- Tax accountant

This unit group excludes:

- Assistant accountant (3313)
- Bookkeeper (4311)

#### 2412 **Financial and Investment Advisers**

Financial and investment advisers develop financial plans for individuals and organisations, and invest and manage funds on their behalf.

Tasks include:

- building and maintaining a client base
- interviewing clients to determine financial status and objectives, risk tolerance and other information needed to develop financial plans and investment strategies
- setting financial objectives, and developing and implementing strategies for achieving the financial objectives
- arranging to buy and sell stocks and bonds for clients
- monitoring investment performance, and reviewing and revising investment plans based on modified needs and changes in markets
- Providing consultancy services to individuals and organisations to advise them on better financial and investments managements

This unit group includes:

- Financial investment adviser
- Relationship manager

This unit group excludes:

- Insurance agent (3321)
- Independent financial planner (3321)

#### 2413 **Financial Analysts and Related Professionals**

Financial analysts and related professionals conduct quantitative analyses of information affecting investment programmes of public or private institutions.

Tasks include:

- analysing financial information to produce forecasts of business, industry, and economic conditions for use in making investment decisions
- maintaining knowledge and staying abreast of developments in the fields of industrial technology, business, finance, and economic theory
- interpreting data affecting investment programmes, such as price, yield, stability, future trends in investment risks, and economic influences
- monitoring fundamental economic, industrial, and corporate developments through the analysis of information obtained from financial publications and services, investment banking firms, government agencies, trade publications, company sources, and personal interviews

- recommending investments and investment timing to companies, investment firm staff, or the investing public
- determining the prices at which securities should be syndicated and offered to the public
- preparing plans of action for investment based on financial analyses
- evaluating and comparing the relative quality of various securities in a given industry
- presenting oral and written reports on general economic trends, individual corporations, and entire industries

This unit group includes:

- Risk analyst
- Credit analyst
- Equities analyst
- Fund manager
- Treasury manager
- Financial product structurer

This unit group excludes:

- Business consultant (2421)

#### 2414 **Securities and Finance Dealers and Brokers**

Securities and finance dealers and brokers buy and sell securities, stocks, bonds and other financial instruments, and deal on the foreign exchange, on spot, or on futures markets, on behalf of their own company or for customers on a commission basis. They recommend transactions to clients or senior management.

Tasks include:

- obtaining information about the financial circumstances of customers and companies in which investments may be made
- analysing market trends for securities, bonds, stocks and other financial instruments, including foreign exchange
- informing prospective customers about market conditions and prospects
- advising on and participating in the negotiation of terms for, and organisation of, loans and placement of stocks and bonds in the financial market to raise capital for customers
- recording and transmitting buy and sell orders for securities, stocks, bonds or other financial instruments and for foreign exchange for future or immediate delivery

This unit group includes:

- Securities broker
- Stocks and shares broker
- Foreign exchange dealer/broker
- Money broker
- Investment broker

This unit group excludes:

- Securities clerk (4312)

**2415 Insurance Underwriters**

Insurance underwriters identify and measure the risks associated with an activity, determine whether this risk is insurable and what the terms of that acceptance are. They assess a risk according to the likelihood of a claim being made by weighing up a number of factors and asking for detailed information from prospective clients (policyholders).

Tasks include:

- receiving and assessing proposals and propositions for insurance from brokers and clients
- identifying and evaluating the risks associated with a proposal
- calculating premiums, providing quotations and, if acceptable to the client, issuing policies
- negotiating and placing reinsurance contracts
- advising on, negotiating terms for and placing insurance contracts for large or special types of projects, installations or risks

This unit group includes:

- Insurance underwriters

This unit group excludes:

- Insurance agents (3321)
- Insurance brokers (3321)

**2421 Management and Business Consultants**

Management and business consultant assist organisations to achieve greater efficiency and solve business problems. They study business structures, methods, systems and procedures.

Tasks include:

- assisting and encouraging the development of objectives, strategies and plans aimed at achieving customer satisfaction and the efficient use of organisations' resources
- analysing and evaluating current systems and structures
- discussing current systems with staff and observing systems at all levels of organisation
- directing clients towards more efficient organisation and developing solutions to business problems
- undertaking and reviewing work studies by analysing existing and proposed methods and procedures such as administrative and clerical procedures
- recording and analysing organisations' work flow charts, records, reports, manuals and job descriptions
- preparing and recommending proposals to revise methods and procedures, alter work flows, redefine job functions and resolve organisational problems
- assisting in implementing approved recommendations, issuing revised instructions and procedure manuals, and drafting other documentation
- reviewing operating procedures and advising of departures from procedures and standards

This unit group includes:

- Business consultant
- Management consultant

This unit group excludes:

- IT business consultant (2511)

#### 2422 **Policy Administration Professionals**

Policy administration professionals develop and analyse policies guiding the design, implementation and modification of government and commercial operations and programmes.

Tasks include:

- liaising and consulting with programme administrators and other interested parties to identify policy needs
- reviewing existing policies and legislation to identify anomalies and out-of-date provisions
- researching social, economic and industrial trends, and client expectations of programmes and services provided
- formulating and analysing policy options, preparing briefing papers and recommendations for policy changes, and advising on preferred options
- assessing impacts, financial implications, interactions with other programmes and political and administrative feasibility of policies
- conducting threat and risk assessments and developing responses
- reviewing operations and programmes to ensure consistency with policies of the organisation

This unit group includes:

- Policy analyst

This unit group excludes:

- Management consultant (2421)
- Business consultant (2421)

#### 2423 **Human Resource Professionals**

Human resource professionals provide professional business services related to human resource policies such as employee (senior level) recruitment or development, occupational analyses and compensation policies.

Tasks include:

- provide consultancy services on personnel functions relating to employee recruitment, placement, training, promotion, compensation, and employee-management relations or other areas of personnel policy
- studying and analysing jobs performed in an establishment by various means, including interviews with workers, supervisors and management, and writing detailed position, job or occupation descriptions from information obtained
- preparing occupational information or working on occupational classification systems

- advising and working on the foregoing and other aspects of job and occupation analyses in such fields as personnel administration, workforce research and planning, training, or occupational information and vocational guidance

This unit group includes:

- Human resource consultant
- Executive search consultant

This unit group excludes:

- Personnel/Human resource officer (3345)
- Training officer (3345)

#### 2429 **Other Administration Professionals Not Elsewhere Classified**

This unit group covers administrative and related professionals not elsewhere classified in Minor Group 242 'Administration professionals'. Administrative professionals such as research officer (non-statistical), patent associate, patent drafter, trademark examiner and patent examiner are classified here.

#### 2431 **Advertising and Marketing Professionals**

Advertising and marketing professionals develop and coordinate advertising strategies and campaigns, determine the market for new goods and services, and identify and develop market opportunities for new and existing goods and services.

Tasks include:

- planning, developing and organising advertising policies and campaigns to support sales objectives
- advising managers and clients on strategies and campaigns to reach target markets, creating consumer awareness and effectively promoting the attributes of goods and services
- writing advertising copy and media scripts, and arranging television and film production and media placement
- analysing data regarding consumer patterns and preferences
- interpreting and predicting current and future consumer trends
- researching potential demand and market characteristics for new goods and services and collecting and analysing data and other statistical information
- supporting business growth and development through the preparation and execution of marketing objectives, policies and programmes
- commissioning and undertaking market research to identify market opportunities for new and existing goods and services
- advising on all elements of marketing such as product mix, pricing, advertising and sales promotion, selling, and distribution channels

This unit group includes:

- Market research analyst
- Market researcher
- Creative director (advertising)

**2432 Public Relations Professionals**

Public relations professionals plan, develop and evaluate information and communication strategies for clients that create an understanding and a favourable view of businesses and other organisations, their goods and services, and their role in the community.

Tasks include:

- planning and organising publicity campaigns and communication strategies
- advising on the public relations implications of their policies, programmes and practices preparing and controlling the issue of news and press releases
- undertaking and commissioning public opinion research, analysing the findings and planning public relations and promotional campaigns
- organising special events, seminars, entertainment, competitions and social functions to promote goodwill and favourable publicity
- discussing issues of business strategy, products, services and target client base with management to identify public relations requirements
- representing organisations and arranging interviews with publicity media
- provide consultancy services on planning and organising publicity campaigns and communication strategies
- writing, editing and arranging for the effective distribution of press releases, newsletters and other public relations material
- addressing individuals, clients and other target groups through meetings, presentations, the media and other events to enhance the public image of an organisation

This unit group includes:

- Public relations consultant
- Press liaison officer
- Public relations officer
- Corporate communications officer
- Public information officer
- Publicity agent

**2433 Specialised Goods Sales Professionals**

Specialised goods sales professionals represent companies in selling a range of industrial, medical, pharmaceutical, technical and other specialised goods and services to industrial, business, professional and other establishments and provide specific information as required based on their specialised skills and/or knowledge of the goods and services in a particular field or subject matter.

Tasks include:

- compiling lists of prospective client businesses by using directories and other sources
- acquiring and updating knowledge of employer's and competitors' goods and services and of market conditions
- visiting regular and prospective client businesses to establish and act on selling opportunities
- assessing clients' needs and resources and recommending appropriate goods or services

- providing input to product design where goods or services must be tailored to suit clients' needs
- developing reports and proposals as part of sales presentations to demonstrate benefits from the use of goods or services
- estimating costs of installing and maintaining the equipment or service
- monitoring customers' changing needs and competitor activity, and reporting these developments to sales management
- quoting and negotiating prices and credit terms, and preparing and administering contracts
- arranging delivery of goods, installation of equipment and the provision of services
- reporting to sales management on sales made and the marketability of goods and services
- reporting customers' reactions and requirements to manufacturers
- consulting with clients after sale to ensure a satisfactory resolution of any problems, and provide ongoing support
- soliciting orders and selling specialised goods to retail, industrial, wholesale and other establishments
- selling specialised equipment, supplies and related services to business establishments or individuals
- providing prospective customers with information about the characteristics and functions of the products and equipment for sale, and demonstrating its use or qualities

This unit group includes:

- Technical sales representative
- Medical sales representative
- Treasury sales executive

This unit group excludes:

- Shop sales assistant (5220)
- Door-to-door salesperson (5242)

2434

### **Trade and Ship Brokers**

Trade and ship brokers buy and sell commodities and shipping services, usually in bulk, on behalf of their own company or for customers on a commission basis.

Tasks include:

- establishing contact between buyers and sellers of commodities
- discussing buying or selling requirements of clients and giving advice accordingly
- buying and selling cargo space on ships
- negotiating purchase or sale of commodities and commodity futures
- finding cargo and/or storage space for commodities and negotiating freight, shipping and storage charges
- monitoring and analysing market trends and other factors affecting the supply and demand for commodities and shipping services



This unit group includes:

- Commodities broker
- Trade broker
- Ship broker
- Bunker trader
- Oil trader

This unit group excludes:

- Commodity futures broker (2414)
- Securities broker (2414)
- Securities dealer (2414)
- Financial futures broker (2414)
- Insurance broker (3321)

### 2511 **Systems Analysts**

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

Tasks include:

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

This unit group includes:

- Systems designer
- Systems analyst
- Network systems analyst
- IT business analyst
- IT business process consultant
- Enterprise architect

This unit group excludes:

- Systems programmer (2514)

### 2512 **Software, Web and Multimedia Developers**

Software, web and multimedia developers research, analyse and evaluate requirements for existing or new software, web and multimedia applications. They also design, develop, test and maintain software, web and multimedia solutions to meet the requirements.

Tasks include:

- researching, analysing and evaluating requirements for software, web and multimedia applications
- designing, and developing computer software, web and multimedia systems
- designing and developing digital animations, imaging, presentations, games, audio and video clips, and Internet applications using multimedia software, tools and utilities, interactive graphics and programming languages
- consulting with engineering staff to evaluate interface between hardware and software
- developing and directing software testing and validation procedures
- modifying existing software to correct errors, to adapt it to new hardware or to upgrade interfaces and improve performance
- directing software programming and development of documentation
- assessing, developing, upgrading and documenting maintenance procedures for software, web and multimedia applications
- assisting in analysing, specifying and developing Internet strategies, web-based methodologies and development plans
- consulting with customers concerning maintenance of software, web and multimedia systems

This unit group includes:

- Software developer
- Web developer
- Multimedia developer
- Computer games developer
- Mobile applications developer

This unit group excludes:

- Applications programmer (2514)

## 2514 **Applications and Systems Programmers**

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

Tasks include:

- writing and maintaining programme code outlined in instructions and specifications in accordance with quality accredited standards
- revising, repairing or expanding existing programmes to increase operating efficiency or adapt to new requirements
- conducting trial runs of programmes and software applications to confirm that they will produce the desired information
- compiling and writing documentation of programme development
- identifying and communicating technical problems, processes and solutions

This unit group includes:

- Applications programmer
- Systems programmer

This unit group excludes:

- Software developer (2512)
- Web developer (2512)
- Multimedia developer (2512)

#### 2515 **Information Technology Testing and Quality Assurance Professionals**

Information Technology (IT) testing and quality assurance professionals specialise in quality assurance including software testing.

Tasks include:

- developing and documenting software testing plans
- installing software and hardware and configuring operating system software in preparation for testing
- verifying that programmes function according to user requirements and established guidelines
- executing, analysing and documenting results of software application tests and information and telecommunication systems tests
- developing and implementing software and information system testing policies, procedures and scripts

This unit group includes:

- IT testing specialist
- IT quality assurance specialist
- IT auditor

This unit group excludes:

- IT security specialist (2524)

#### 2516 **Information Technology Project Managers**

Information technology project managers plan, direct and coordinate information technology projects.

Tasks include:

- consulting with users, to assess computing needs and system requirements and specifying technology to meet those needs
- formulating and directing information and communication technology (ICT) strategies and plans
- directing the selection and installation of ICT resources and the provision of user training
- directing ICT operations, analysing workflow, establishing priorities, developing standards and setting deadlines
- establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources

This unit group includes:

- IT project manager

This unit group excludes:

- Information and communication technology service manager (1330)
- IT service manager (1330)

2519 **Software and Applications Developers and Analysts Not Elsewhere Classified**

This unit group covers professionals not classified elsewhere in Minor Group 251 'Software and applications developers and analysts'.

This unit group includes:

- Artificial intelligence specialist

2521 **Database Designers and Administrators**

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

Tasks include:

- designing and developing database architecture, data structures, tables, dictionaries and naming conventions for information systems projects
- designing, constructing, modifying, integrating, implementing and testing database management systems
- conducting research and providing advice on the selection, application and implementation of database management tools
- developing and implementing data administration policy, documentation, standards and models
- developing policies and procedures for database access and usage and for the backup and recovery of data
- performing the operational establishment and preventive maintenance of backups, recovery procedures, and enforcing security and integrity controls

This unit group includes:

- Database administrator
- Database architect

This unit group excludes:

- Computer systems administrator (2522)
- Network administrator (2522)
- Website administrator (3514)

2522 **Network, Servers and Computer Systems Administrators**

Network and computer systems administrators develop, control, maintain and support the optimal performance and security of information technology systems.

Tasks include:

- maintaining and administering computer networks and related computing environments including computer network, systems software, applications software and all configurations
- recommending changes to improve systems and network configurations, and determining hardware or software requirements related to such changes
- diagnosing network and system problems
- performing data backups and disaster recovery operations
- operating master consoles to monitor the performance of computer systems and networks, and to coordinate computer network access and use

This unit group includes:

- Computer systems administrator
- Network administrator

This unit group excludes:

- Database administrator (2521)
- Website administrator (3514)
- Network architect (2523)
- Network engineer (2523)

2523

### **Computer Network and Infrastructure Professionals**

Computer network professionals research, analyse and recommend strategies for network infrastructure and development. They also implement, manage, maintain and configure network hardware and software, and monitor, troubleshoot and optimise performance.

Tasks include:

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

This unit group includes:

- Network architect
- Network engineer
- Infrastructure architect
- Infrastructure engineer

#### 2524 **Information Technology Security Specialists**

Information technology security specialists specialise in providing security assurance of information technology systems.

Tasks include:

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

This unit group includes:

- IT security specialist

This unit group excludes:

- IT testing security specialist (2515)
- IT quality assurance specialist (2515)

#### 2529 **Database and Network Professionals Not Elsewhere Classified**

This unit group covers database and networking professionals not elsewhere classified in Minor Group 252 'Database, network and infrastructure professionals'. Data scientist is included in this group.

**2611 Lawyers**

Lawyers give clients legal advice on a wide variety of subjects (including litigation, Intellectual Property, Corporate Law, Legal Compliance, Data Privacy, Dispute Resolution and Contract Negotiation), draw up legal documents, represent clients before administrative boards or tribunals and plead cases or conduct prosecutions in courts of justice. Lawyers undertaking the role of an arbitrator, mediator, adjudicator on a part-time basis should be classified based on their full-time jobs, e.g. Judges or Lawyers. Law graduates undergoing pupillage are also classified here.

Tasks include:

- giving clients legal advice on a wide variety of subjects and undertaking legal business on clients' behalf
- researching legal principles, statutes and previous court decisions related to specific cases
- gathering evidence to formulate a defence or to initiate legal actions, by such means as interviewing clients and witnesses to ascertain the facts of a case
- evaluate findings and develop strategies and arguments in preparation for presentation of cases
- pleading clients' cases before courts of law, tribunals and administrative boards or instructing barristers to plead in higher courts of justice
- accepting briefs and pleading in the higher court
- acting as prosecutor on behalf of the Government in criminal cases
- negotiating settlements in matters which involve legal disputes
- drafting legislation and preparing government regulations based on existing laws
- drawing up legal documents such as contracts, real estate transactions and wills and preparing statements of legal opinions

This unit group includes:

- Attorney
- Barrister
- Lawyer
- Public prosecutor
- Solicitor
- In-house legal counsel
- Patent attorney
- Trademark attorney

This unit group excludes:

- Judge (2612)
- Legal clerk (4417)
- Intellectual property strategist (2909)
- Patent strategist (2909)
- Patent agent (2909)
- Trademark agent (2909)

**2612 Judges**

Judges preside over civil and criminal proceedings in courts of law.

Tasks include:

- presiding over trials and hearings
- interpreting and enforcing rules of procedure and making rulings regarding the admissibility of evidence
- determining the rights and obligations of the parties involved
- weighing and considering evidence in non-jury trials and deciding legal guilt or innocence or degree of liability of the accused or defendant
- passing sentence on persons convicted in criminal cases, determining damages or other appropriate remedy in civil cases and issuing court orders
- researching legal issues and writing opinions on the issues

This unit group includes:

- Chief justice
- Coroner
- Judge
- Magistrate
- Registrar (in judiciary)

This unit group excludes:

- Lawyer (2611)

**2621 Archivists, Curators and Conservators**

Archivists, curators and conservators collect, appraise and ensure the safekeeping and preservation of the contents of archives, artefacts and records of historical, cultural, administrative and artistic interest, and of art and other objects. They plan, devise and implement systems for the safekeeping of records and historically valuable documents

Tasks include:

- evaluating and preserving records for administrative, historical, legal, evidential and other purposes
- directing or carrying out the preparation of indexes, bibliographies, microfilm copies and other reference aids to the collected material and making them available to users
- researching the origin, distribution and use of materials and objects of cultural and historical interest
- organising, developing and maintaining collections of artistic, cultural, scientific or historically significant items
- directing or undertaking classification and cataloguing of museum and art gallery collections and organising exhibitions
- researching into, appraising, and developing, organising and preserving historically significant and valuable documents such as government papers, private papers, photographs, maps, manuscripts audio-visual materials
- preparing scholarly papers and reports
- planning and implementing the computerised management of archives and electronic records



- organising exhibitions at museums and art galleries, publicising exhibits and arranging special displays for general, specialised or educational interest
- appraising and acquiring archival materials to build and develop an archival collection for research purposes

This unit group includes:

- Archivist
- Art gallery curator
- Museum curator
- Conservator (art works)

2622

### **Librarians and Related Information Professionals**

Librarians and related information professionals collect, select, develop, organise and maintain library collections and other information repositories. They also organise and control other library services and provide information for users.

Tasks include:

- organising, developing and maintaining a systematic collection of books, periodicals and other printed, audio-visually and digitally recorded material
- selecting and recommending acquisitions of books and other printed or audio-visually and digitally recorded material
- organising, classifying and cataloguing library material
- managing library borrowing and inter-library loan facilities and information networks
- retrieving material and providing information to business and other users based on the collection itself or on library and information-network systems
- conducting research and analysing or modifying library and information services in accordance with changes in users' needs
- devising and implementing schemes and conceptual models for the storage, organisation, classification and retrieval of information
- preparing scholarly papers and reports
- performing manual, on-line and interactive media reference searches, making interlibrary loans and performing other functions to assist users in accessing library materials

This unit group includes:

- Bibliographer
- Cataloguer
- Librarian

This unit group excludes:

- Library clerk (4411)
- Library attendant (9625)
- Library officer (3433)

**2631 Economists**

Economists conduct research, monitor data, analyse information and prepare reports and plans to resolve economic and business problems and develop models to analyse, explain and forecast economic behaviour and patterns. They provide advice to business, interest groups and governments to formulate solutions to present or projected economic and business problems.

Tasks include:

- forecasting changes in the economic environment for short-term budgeting, long-term planning and investment evaluation
- formulating recommendations, policies and plans for the economy, corporate strategies and investment, and undertaking feasibility studies for projects
- monitoring economic data to assess the effectiveness, and advise on the appropriateness, of monetary and fiscal policies
- forecasting production and consumption of specific products and services based on records of past production and consumption and general economic and industry-specific conditions
- preparing forecasts of income and expenditure, interest rates and exchange rates
- analysing factors that determine labour force participation, employment, wages, unemployment and other labour market outcomes
- applying mathematical formulae and statistical techniques and apply to test economic theories and devise solutions to economic problems
- compiling, analysing and interpreting economic data using economic theory and a variety of statistical and other techniques
- advising on economic policy and possible courses of action in the light of past, present and projected economic factors and trends
- preparing scholarly papers and reports
- examining problems related to the economic activities of individual companies
- conducting research on market conditions in local, regional or national areas to set sales and pricing levels for goods and services, to assess market potential and future trends and to develop business strategies

This unit group includes:

- Econometrician
- Economist

This unit group excludes:

- Statistician (2122)

**2632 Sociologists, Anthropologists and Related Professionals**

Sociologists, anthropologists and related professionals investigate and describe the structure of societies, the origin and evolution of humanity, and the interdependence between environmental conditions and human activities. They make the knowledge obtained available as a basis for policy decisions.

Tasks include:

- conducting research on the origin, development, structure, social patterns, organisations and inter-relationships of human society
- tracing the origin and evolution of humanity through the study of changing characteristics and cultural and social institutions
- tracing the development of humanity through the material remains of its past, such as dwellings, temples, tools, pottery, coins, weapons, or sculpture
- studying physical and climatic aspects of areas and 'regions, and correlating these findings with economic, social and cultural activities
- advising on the practical application of these findings in the formulation of economic and social policies for population groups and regions, and for the development of markets
- preparing scholarly papers and reports

This unit group includes:

- Anthropologist
- Ethnologist
- Sociologist
- Social research analyst

This unit group excludes:

- Geographer (2633)
- Archaeologist (2633)

2633

### **Historians, Political Scientists and Other Social Science Professionals**

Historians, political scientists and other social science professionals conduct research into the nature of human experience and existence, phases or aspects of past human activities, and political structures, movements and behaviour. They document and report on findings to inform and guide political and individual actions

Tasks include:

- researching, mostly by reasoning, into the general causes, principles and meanings of the world, human actions, experience and existence, and interpreting and developing philosophical concepts and theories
- consulting and comparing primary sources, such as original or contemporary records of past events, and secondary sources such as archaeological or anthropological findings
- extracting relevant material, checking its authenticity, and researching into and describing the history of a particular period, country or region, or a particular facet - for example economic, social or political - of its history
- conducting research in such fields as political philosophy, or past and present theory and practice of political systems, institutions or behaviour
- observing contemporary political institutions and opinions, collecting data on them from various sources, including interviews with government and political party officials and other relevant persons
- presenting findings and conclusions for publication or use by government, political parties or other organisations and interested persons

- preparing scholarly papers and reports

This unit group includes:

- Historian
- Philosopher
- Political scientist
- Geographer
- Archaeologist

#### 2634 **Psychologists**

Psychologists research into and study the mental processes and behaviour of human beings as individuals or in groups, and apply this knowledge to promote personal, social, educational or occupational adjustment and development.

Tasks include:

- planning and carrying out tests to measure mental, physical and other characteristics such as intelligence, abilities, aptitudes, potentialities, etc., interpreting and evaluating results, and providing advice
- analysing the effect of heredity, social, occupational and other factors on individual thought and behaviour
- conducting counselling or therapeutic interviews with individuals and groups, and providing follow-up services
- maintaining required contacts, such as those with family members, educational authorities or employers, and recommending possible solutions to, and treatment of, problems
- studying psychological factors in the diagnosis, treatment and prevention of mental illnesses and emotional or personality disorders, and conferring with related professionals
- preparing scholarly papers and reports
- formulating achievement, diagnostic and predictive tests for use by teachers in planning methods and content of instruction

This unit group includes:

- Clinical psychologist
- Educational psychologist
- Occupational psychologist
- Forensic psychologist

#### 2635 **Social Work and Counselling Professionals**

Social work and counselling professionals provide advice and guidance to individuals, families, groups, communities and organisations in response to social and personal difficulties. They assist clients to develop skills and access resources and support services needed to respond to issues arising from unemployment, poverty, disability, addiction, criminal and delinquent behaviour, marital and other problems.

Tasks include:

- interviewing clients individually, in families, or in groups, to assess their situation and problems and determine the types of services required

- analysing the client's situation and presenting alternative approaches to resolving problems
- compiling case records or reports for courts and other legal proceedings
- providing counselling, therapy and mediation services and facilitating group sessions to assist clients to develop skills and insights needed to deal with and resolve their social and personal problems
- planning and implementing programmes of assistance for clients including crisis intervention and referral to agencies that provide financial assistance, legal aid, housing, medical treatment and other services
- investigating cases of abuse or neglect and taking action to protect children and other at risk persons
- working with offenders during and after sentence, to help them to integrate into the community and to change attitudes and behaviour in order to reduce further offending
- providing advice to prison governors and to probation and parole review boards that help determine whether, and under what conditions, an offender should be incarcerated, released from prison or undergo alternative correctional measures
- acting as advocates for client groups in the community and lobbying for solutions to problems affecting them
- developing prevention and intervention programmes to meet community needs
- maintaining contact with other social service agencies, educational institutions and healthcare providers involved with clients to provide information and obtain feedback on clients' overall situation and progress

This unit group includes:

- Child and youth counsellor
- Family counsellor
- Marriage counsellor
- Parole officer
- Probation officer
- Social worker

This unit group excludes:

- Youth worker (3412)

2641

### **Authors and Related Writers**

Authors and related writers plan, research and write books, scripts, storyboards, plays, essays, speeches, manuals, specifications and other non-journalistic articles for publication or presentation.

Tasks include:

- conceiving, writing and editing novels, plays, scripts, poetry and other material for publication or presentation
- conducting research to establish factual content and to obtain other necessary information

- writing scripts and continuities and preparing programmes for stage, film, radio and television productions
- analysing material, such as specifications, notes and drawings, and writing manuals, user guides and other documents to explain clearly and concisely the installation, operation and maintenance of software, electronic, mechanical and other equipment
- writing brochures, handbooks and similar technical publications
- selecting material for publication, checking style, grammar and accuracy of content, arranging for any necessary revisions and checks proof copies before printing

This unit group includes:

- Author
- Book editor
- Essayist
- Novelist
- Playwright
- Poet
- Script writer
- Technical writer
- Writer

This unit group excludes:

- Journalist (2642)
- Newspaper editor (2642)

2642

### **Journalists**

Journalists research, investigate, interpret and communicate news and public affairs through newspapers, television, radio and other media.

Tasks include:

- collecting local, national and international news through interviews, investigation and observation, attending public events, seeking out records, reviewing written work, attending film and stage performances
- collecting, reporting and commenting on news and current affairs for publication in newspapers and periodicals, or for broadcasting by radio, television or webcast media
- receiving, analysing and verifying news and other copy for accuracy
- interviewing politicians and other public figures at press conferences and on other occasions, including individual interviews recorded for radio, television or webcast media
- researching and reporting on developments in specialised fields such as medicine, science and technology
- writing editorials and commentaries on topics of current interest to stimulate public interest and express the views of a publication or broadcasting station
- writing critical reviews of literary, musical and other artistic works based on knowledge, judgement and experience for newspapers, television, radio and other media

- selecting material for publication, checking style, grammar, accuracy and legality of content and arranging for any necessary revisions
- liaising with production staff in checking final proof copies immediately prior to printing
- selecting, assembling and preparing publicity material about business or other organisations for issue through press, radio, television and other media

This unit group includes:

- Journalist
- Broadcast journalist
- Newspaper editor
- Sports editor
- Sub-editor

This unit group excludes:

- Book author (2641)
- Book editor (2641)
- Photo-journalist (3431)

2643

### **Translators, Interpreters and Other Linguists**

Translators and interpreters translate or interpret from one language into another and study the origin, development and structure of languages.

Tasks include:

- studying relationships between ancient parent languages and modern language groups, tracing the origin and evolution of words, grammar and language forms, and presenting findings
- advising on or preparing language classification systems, grammars, dictionaries and similar materials
- translating from one language into another and ensuring that the correct meaning of the original is retained, that legal, technical or scientific works are correctly rendered, and that the phraseology and terminology of the spirit and style of literary works are conveyed as far as possible
- developing methods for the use of computers and other instruments to improve productivity and quality of translation
- interpreting from a spoken or a signed language into another spoken or signed language, in particular at conferences, meetings and similar occasions, and ensuring that the correct meaning and, as far as possible, the spirit of the original are transmitted
- revising and correcting translated material

This unit group includes:

- Translator
- Interpreter
- Court interpreter
- Sign language interpreter

This unit group excludes:

- Author (2641)
- Book editor (2641)
- Journalist (2642)

## 2651 **Visual Artists**

Visual artists create and execute works of art by sculpting, painting, drawing, creating cartoons, engraving or using other techniques.

Tasks include:

- conceiving and developing ideas, designs and styles for paintings, drawings and sculptures
- arranging objects, positioning models, and selecting landscapes and other visual forms according to chosen subject matter
- selecting artistic media, method and materials
- creating representational or abstract three-dimensional or relief forms by shaping, carving and working and combining materials such as, wood, stone, clay, metal, ice or paper
- creating representational or abstract drawings and paintings using pencils, ink, chalk, oil paints, water colours or through the application of other techniques
- creating drawings and engraving or etching them on metal, wood, or other materials
- creating cartoons to depict persons and events, often in caricature
- restoring damaged, soiled and faded paintings and other art objects

This unit group includes:

- Cartoonist
- Ceramics artist
- Motion picture cartoonist
- Painting restorer
- Picture restorer
- Portrait painter
- Sculptor

This unit group excludes:

- Industrial product designer (2163)
- Graphic and multimedia designers (2166)
- Art and craft instructor (3620)

## 2652 **Musicians, Composers and Singers**

Musicians, composers and singers write, arrange, conduct and perform musical compositions.

Tasks include:

- creating melodic, harmonic and rhythmic structures to express ideas and emotions in musical form
- translating ideas and concepts into standard musical signs and symbols for reproduction and performance



- adapting or arranging music for particular instrumental or vocal groups, instruments or occasions
- conducting instrumental or vocal groups
- selecting music for performances and assigning instrumental parts to musicians
- playing one or more musical instruments as a soloist or as a member of an orchestra or a musical group
- singing as soloists or members of vocal groups or other bands
- practicing and rehearsing to maintain a high standard of performance

This unit group includes:

- Band leader
- Composer
- Instrumentalist
- Music conductor
- Orchestrator
- Singer

This unit group excludes:

- Choreographer (2653)
- Dancer (2653)

### 2653 **Dancers and Choreographers**

Dancers and choreographers conceive and create or perform dances.

Tasks include:

- conceiving and creating dances, which often convey a story, theme, idea or mood, by a pattern of steps, movements and gestures
- performing dances as a soloist, with a partner or as a member of a dancing group before live audiences or for film, television or other visual media
- training, exercising and attending dance classes to maintain the required levels of ability and fitness
- directing and participating in rehearsals to practice dance steps and techniques required for a performance
- auditioning for dance roles or for memberships in dance companies
- coordinating the production music with the music directors

This unit group includes:

- Choreographer
- Ballet dancer

This unit group excludes:

- Dance instructor (3620)

### 2654 **Film, Stage and Related Directors and Producers**

Film, stage and related directors and producers oversee and control the technical and artistic aspects of motion pictures, television or radio productions and stage shows.

Tasks include:

- choosing writers, studying scripts to determine artistic interpretation, instructing actors on acting methods
- directing all aspects of dramatic productions on stage, television, radio or in motion pictures, including choice of actors, and final decisions concerning costumes, set designs, sound or lighting effects
- planning, organising and controlling the various stages and scheduling involved in the production of presentations, motion pictures, television shows and radio programmes
- engaging and supervising all technical personnel, and determining the treatment, scope and scheduling of production
- maintaining production archives and negotiating royalties
- creating, planning, writing scripts for recording, videotaping and editing programmes
- supervising the positioning of scenery, props and lighting and sound equipment

This unit group includes:

- Artistic director
- Film editor
- Motion picture director
- Stage director
- Stage manager
- Theatre producer

This unit group excludes:

- Broadcasting operations technician (3521)
- Sound recording equipment operator (3521)
- Video camera operator (3521)
- Motion picture camera operator (3521)
- Radio and television studio equipment operator (3521)

2655

### **Actors**

Actors portray roles in motion pictures, television or radio productions and stage shows.

Tasks include:

- learning lines and cues and playing parts in dramatic productions on stage, commercials, television, radio or in motion pictures
- assuming characters created by a playwright or author and communicating this to an audience
- telling stories or reading literary works aloud to educate or entertain listeners
- preparing for performances through rehearsals under the instruction and guidance of production directors
- reading scripts and undertaking research to gain understanding of parts, themes and characteristics
- acting parts and portraying roles as developed in rehearsals in film, television, radio and stage productions

This unit group includes:

- Actor
- Dramatic actor
- Impersonator

2656

**Radio and Television Presenters and Related Professionals**

Radio and television presenters and related professionals read news bulletins, conduct interviews, and make other announcements or introductions on radio, television, and in theatres and other establishments or media.

Tasks include:

- reading news bulletins and making other announcements on radio or television
- introducing performing artists or persons being interviewed, and making related announcements on radio, television, or in theatres, night-clubs and other establishments
- interviewing persons in public, especially on radio and television
- studying background information in order to prepare for programmes or interviews
- commenting on music and other matters , such as weather or traffic conditions

This unit group includes:

- Radio announcer
- Television announcer
- Compere
- Newscaster (television)
- News anchor
- Radio presenter
- Sports announcer (television)
- Dubbing artiste

This unit group excludes:

- Journalist (2642)

**2901 Religious Professionals**

Religious professionals function as perpetrators of sacred traditions, practices and beliefs. They conduct religious services, celebrate or administer the rites of a religious faith or denomination, provide spiritual and moral guidance and perform other functions associated with the practice of a religion.

Tasks include:

- perpetuating sacred traditions, practices and beliefs
- conducting religious services, rites and ceremonies
- undertaking various administrative and social duties, including participating in committees and meetings of religious organisations
- providing spiritual and moral guidance in accordance with the religion professed
- propagating religious doctrines in own country or abroad
- preparing religious sermons and preachings
- developing and directing study courses and religious education programmes
- counselling individuals regarding interpersonal, health, financial, and religious problems
- scheduling and participating in special events such as camps, conferences, seminars, and retreats

This unit group includes:

- Priest
- Rabbi
- Minister of religion
- Curate
- Missionary
- Salvationist
- Theologian

This unit group excludes:

- Monk (3991)
- Nun (3991)

**2909 Other Professionals Not Elsewhere Classified**

This unit group covers professionals not classified elsewhere in Major Group 2 'Professionals'. This group includes intellectual property strategist, patent strategist, patent agent and trademark agent.

**3100 Assistant Engineers**

Assistant engineers assist in the development of operational methods in engineering, design of structures, machinery and equipment or application of existing knowledge to solve engineering problems.

Tasks include:

- assisting in the design of new products
- developing or improving production processes
- assisting in technical supervision of manufacture, utilisation, maintenance and repair of structures, machinery and equipment

This unit group includes:

- Assistant electrical engineer
- Assistant mechanical engineer
- Assistant manufacturing engineer

This unit group excludes:

- Civil engineering technician (3112)
- Electrical engineering technician (3113)
- Electronics engineering technician (3114)
- Mechanical engineering technician (3115)
- Chemical engineering technician (3116)
- Manufacturing engineering technician (3117)

**3111 Chemical and Physical Science Technicians**

Chemical and physical science technicians perform technical tasks to aid in research in chemistry, physics, geology, geophysics, meteorology and astronomy, and in the development of industrial, medical, military and other practical applications of research results.

Tasks include:

- collecting samples and preparing materials and equipment for experiments, tests and analyses
- carrying out routine laboratory tests and performing a variety of technical support functions to assist chemical and physical scientists in research, development, analysis and testing
- controlling the quality and quantity of laboratory supplies by testing samples and monitoring usage and preparing detailed estimates of quantities and costs of materials and labour required for projects, according to the specifications given
- setting up, operating, and maintaining laboratory instruments and equipment, monitoring experiments, making observations, and calculating and recording results
- preparing materials for experimentation such as freezing and slicing specimens and mixing chemicals
- collecting and testing earth and water samples, recording observations and analysing data in support of geologists or geophysicists

This unit group includes:

- Chemistry technician
- Physics technician
- Geology technician
- Meteorological technician

This unit group excludes:

- Assistant chemical engineer (3100)
- Chemical engineering technician (3116)
- Life science technician (except medical) (3141)

### 3112 **Civil Engineering Technicians**

Civil engineering technicians perform technical tasks in civil engineering research, design, construction, operation, maintenance and repair of buildings and other structures, such as water supply and wastewater treatment systems, bridges, roads, dams and airports.

Tasks include:

- performing or assisting with field and laboratory tests of soils and construction materials using various computer software packages including spreadsheets to provide administrative support
- providing technical assistance connected with the construction of buildings and other structures, and with surveys or the preparation of survey reports
- ensuring compliance with design specifications, relevant legislation and regulations, and maintenance of desired standards of materials and work
- applying technical knowledge of building and civil engineering principles and practices in order to identify and solve problems arising
- assisting with the preparation of detailed estimates of quantities and costs of materials and labour required for projects, according to the specifications given
- organising maintenance and repairs
- supervising other workers

This unit group includes:

- Civil engineering technician
- Structural engineering technician
- Land surveying technician
- Resident technical officer

This unit group excludes:

- Assistant civil and structural engineer (3100)
- Marine surveyor (3115)
- Airworthiness surveyor (3115)

**3113 Electrical Engineering Technicians**

Electrical engineering technicians perform technical tasks to aid in electrical engineering research and in the design, manufacture, assembly, construction, operation, maintenance and repair of electrical equipment, facilities and distribution systems.

Tasks include:

- providing technical assistance in research on and development of electrical equipment and facilities, or testing prototypes
- designing and preparing blueprints of electrical installations and circuitry according to the specifications given
- preparing detailed estimates of quantities and costs of materials and labour required for manufacture
- monitoring technical aspects of the manufacture, installation, utilisation, maintenance and repair of electrical systems and equipment to ensure satisfactory performance and compliance with specifications and regulations
- planning installation methods, checking completed installation for safety and controls or undertaking the initial running of the new electrical equipment or systems
- assembling, installing, testing, calibrating, modifying and repairing electrical equipment and installations to conform with regulations and safety requirements

This unit group includes:

- Electrical engineering technician (general)
- Electrical engineering technician (high voltage)

This unit group excludes:

- Assistant electronics engineer (3100)
- Electronics engineering technician (3114)
- Electrical mechanic (7412)
- Electrical equipment/component assembler (8212)

**3114 Electronics Engineering Technicians**

Electronics engineering technicians perform technical tasks to aid in electronic research and in the design, manufacture, assembly, construction, operation, maintenance and repair of electronic equipment.

Tasks include:

- providing technical assistance in research and development of electronic equipment, or testing prototypes
- designing and preparing blueprints of electronic circuitry according to the specifications given
- preparing detailed estimates of quantities and costs of materials and labour required for the manufacture and installation of electronic equipment, according to the specifications given
- monitoring technical aspects of the manufacture, utilisation, maintenance and repair of electronic equipment to ensure satisfactory performance and ensure compliance with specifications and regulations
- assisting in the design, development, installation, operation and maintenance of electronic systems

- planning installation methods, checking completed installation for safety and controls or undertaking the initial running of the new electronic equipment or system
- conducting tests of electronic systems, collecting and analysing data, and assembling circuitry in support of electronics engineers

This unit group includes:

- Semi-conductor technician
- Audio and video equipment technician
- Instrumentation technician

This unit group excludes:

- Assistant electronics engineer (3100)
- Electrical engineering technician (3113)
- Telecommunications technician (3522)
- Electronics mechanic (7421)
- Electronics equipment/component assembler (8212)

### 3115 **Mechanical Engineering Technicians**

Mechanical engineering technicians perform technical tasks to aid in mechanical engineering research and in the design, manufacture, assembly, construction, operation, maintenance and repair of machines, components and mechanical equipment.

Tasks include:

- providing technical assistance in research on and development of machines and mechanical installations, facilities and components, or testing prototypes
- designing and preparing layouts of machines and mechanical installations, facilities and components according to the specifications given
- preparing detailed estimates of quantities and costs of materials and labour required for manufacture and installation according to the specifications given
- monitoring technical aspects of manufacture, utilisation, maintenance and repair of machines and mechanical installations, facilities and components to ensure satisfactory performance and compliance with specifications and regulations
- developing and monitoring the implementation of safety standards and procedures for marine survey work in relation to ships' hulls, equipment and cargoes
- assembling and installing new and modified mechanical assemblies, components, machine tools and controls, and hydraulic power systems
- conducting tests of mechanical systems, collecting and analysing data, and assembling and installing mechanical assemblies in support of mechanical engineers
- ensuring that mechanical engineering designs and finished work are within specifications, regulations and contract provisions

This unit group includes:

- Aeronautical engineering technician
- Automotive engineering technician
- Marine surveyor
- Airworthiness surveyor



This unit group excludes:

- Assistant mechanical engineer (3100)
- Aircraft engine mechanic (7232)
- Machinery mechanic (7233)

### 3116 **Chemical Engineering Technicians**

Chemical engineering technicians perform technical tasks to aid in chemical engineering research and in the design, manufacture, construction, operations, maintenance and repair of chemical plants.

Tasks include:

- assisting in research on and development of industrial chemical processes, plant and equipment, or testing prototypes
- designing and preparing layouts of chemical plants according to the specifications given
- preparing detailed estimates of quantities and costs of materials and labour required for manufacture and installation according to the specifications given
- monitoring technical aspects of the construction, installation, operation, maintenance and repair of chemical plants to ensure satisfactory performance and compliance with specifications and regulations
- conducting chemical and physical laboratory tests to assist scientists and engineers in making qualitative and quantitative analyses of solids, liquids, and gaseous materials

This unit group includes:

- Petroleum refining technician
- Chemical engineering technician

This unit group excludes

- Assistant chemical engineer (3100)
- Chemistry technician (3111)

### 3117 **Manufacturing Engineering Technicians**

Manufacturing engineering technicians perform technical tasks to aid in manufacturing engineering research, as well as in the construction, modification, continued performance and maintenance of equipment and machines in industrial plants. They also assist in the planning of manufacturing activities under the direction of a manufacturing engineer.

Tasks include:

- carrying out operational activities according to required work specification, quality and safety standards
- reading/studying technical product documents, manufacturing specifications etc
- performing routine maintenance on processes/equipment/plant facilities
- identifying faults and troubleshoot production processes/machinery and equipment

This unit group includes:

- Manufacturing engineering technician (general)
- Medical manufacturing specialist

This unit group excludes:

- Manufacturing engineer (2141)

### 3118 **Draughtsmen**

Draughtsmen prepare technical drawings, maps and illustrations from sketches, measurements and other data and copy final drawings and paintings onto printing plates.

Tasks include:

- preparing and revising working drawings from sketches and specifications prepared by engineers and designers for the manufacture, installation and erection of machinery and equipment or for the construction, modification, maintenance and repair of buildings, dams, bridges, roads and other architectural and civil engineering projects
- operating computer-aided design (CAD) or computer-aided design and drafting (CADD) equipment to create, modify and generate hard-copy and digital representations of working drawings
- operating digitising table or similar equipment to transfer hard-copy representation of working drawings, maps and other curves to digital form
- preparing and revising illustrations for reference works, brochures and technical manuals dealing with the assembly, installation, operation, maintenance and repair of machinery and other equipment and goods
- copying drawings and paintings onto stone or metal plates for printing
- preparing wiring diagrams, circuit board assembly diagrams, and layout drawings used for manufacture, installation, and repair of electrical equipment in factories, power plants, and buildings
- creating detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods, and other engineering information
- arranging for completed drawings to be reproduced for use as working drawings

This unit group includes:

- Draughtsperson
- Technical illustrator

This unit group excludes:

- Cartographers (2165)
- Surveyors (2165)

### 3119 **Physical and Engineering Science Technicians Not Elsewhere Classified**

This unit group covers physical and engineering science technicians not classified elsewhere in Minor Group 311 'Physical and engineering science technicians'. For instance, those who assist engineers engaged in developing procedures or conducting research on safety, biomedical, environmental or mining and metallurgical engineering should be classified here.

Tasks include:

- aiding in the identification of potential hazards and introducing safety procedures and devices
- modifying and testing equipment and devices used in the prevention, control, and remediation of environmental pollution, site remediation and land reclamation
- providing technical assistance to aid in research on and development of processes to determine the properties of metals and new alloys
- monitoring technical, regulatory and safety aspects of the construction, installation, operation, maintenance and repair of mineral ore, oil and natural gas exploration, extraction, transport and storage installations and mineral processing plants
- providing technical assistance in geological and topographical surveys, and in the design and layout of oil, natural gas and mineral ore extraction and transportation systems, and processing and refining plants for minerals and metals
- assisting scientists in the use of electrical, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas or petroleum

This unit group includes:

- Mining technician
- Metallurgical technician (extractive)
- Forensic science technician

This unit group excludes:

- Production engineering technician (3117)
- Surveyors (2165)
- Aeronautics engineering technician (3115)

### 3141 **Life Science Technicians (Except Medical)**

Life science technicians (except medical) provide technical support to life science professionals undertaking research, analysis and testing of living organisms, and development and application of products and processes resulting from research in areas such as agriculture, natural resource management, environmental protection, plant and animal biology, microbiology and cell and molecular biology.

Tasks include:

- assisting in designing, setting up and conducting experiments
- setting up, calibrating, operating and maintaining laboratory instruments and equipment
- collecting and preparing specimens and samples, chemical solutions and slides and growing cultures for use in experiments
- performing routine field and laboratory tests
- monitoring experiments to ensure adherence to correct laboratory quality control procedures and health and safety guidelines
- making observations of tests, and analysing, calculating, recording and reporting test results using appropriate scientific methods
- preserving, classifying and cataloguing specimens and samples
- keeping detailed logs of worked performed
- using computers to develop models and analyse data
- using complex and high-powered equipment to perform work

- participating in the research, development and manufacture of products and processes
- ordering and stocking laboratory supplies
- maintaining relevant databases

This unit group includes:

- Biological technician
- Biochemistry technician
- Bacteriology technician
- Food science technician
- Tissue culture technician (non-plant)

This unit group excludes:

- Medical laboratory technician (3212)
- Pathology technician (3212)
- Pharmacy technician (3213)
- Tissue culture technician (plant) (3142)

### 3142 **Agronomy, Horticultural and Farming Technicians**

Technicians in this unit group perform tests and experiments, and provide technical and scientific support to horticultural scientists, as well as agricultural scientists, farmers and farm managers.

Tasks include:

- preparing materials and equipment for experiments, tests and analyses
- collecting and preparing specimens such as soils, plant or animal cells, tissues or parts or animal organs for experiments, tests and analyses
- assisting with and performing experiments, tests and analyses and applying methods and techniques such as microscopy, histochemistry, chromatography, electrophoresis and spectroscopy
- identifying pathogenic micro-organisms and insects, parasites, fungi and weeds harmful to crops and livestock and assisting in devising methods of control
- analysing produce to set and maintain standards of quality
- conducting or supervising operational programmes such as fish hatchery, greenhouse and livestock production programmes
- analysing samples of seeds for quality, purity and germination rating
- collecting data and estimating quantities and costs of materials and labour required for projects
- organising maintenance and repairs of research equipment
- assessing, designing and implementing of processes and systems on the application of water to a green field, nursery or landscape

This unit group includes:

- Horticultural technician
- Tissue culture technician (plant)
- Farming technician (horticulture)
- Farming technician (livestock and fisheries)
- Farming technician (pets)
- Dairy technician
- Irrigation specialist

This unit group excludes:

- Veterinary technician (3240)
- Tissue culture technician (non-plant) (3141)

### 3151 **Ship Engineering Officers**

Ship engineering officers control and participate in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship.

Tasks include:

- controlling and participating in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship
- ordering fuel and other engine-room department stores and maintaining record of operations
- performing technical supervision of the installation, maintenance and repair of ship's machinery and equipment to ensure compliance with specifications and regulations
- inspecting and conducting maintenance and emergency repairs to engines, machinery and auxiliary equipment
- standing engine room watch, monitoring and noting performance of engines, machinery and auxiliary equipment
- supervising other workers

This unit group includes:

- Marine engineering officer
- Ship engineering officer

This unit group excludes:

- Marine engineer (shore-based) (2144)
- Chief engineer (ship) (2171)
- Marine superintendent engineer (2171)

### 3152 **Ships' Deck Officers and Pilots**

Ships' deck officers and pilots navigate ships and similar vessels and perform related functions on shore.

Tasks include:

- navigating ship or similar vessel at sea or on inland waterways
- controlling and participating in deck and bridge-watch activities
- navigating vessels into and out of ports and through channels, straits and other waters where special knowledge is required
- ensuring safe loading and unloading of cargo and observance of safety regulations and procedures by crew and passengers
- performing technical supervision of maintenance and repair of ship to ensure compliance with specifications and regulations
- applying knowledge of principles and practices relating to ship's operation and navigation in order to identify and solve problems arising in the course of their work

- ordering ship's stores and recruiting crew as required and maintaining record of operations
- transmitting and receiving routine and emergency information with shore stations and other ships
- supervising other workers

This unit group includes:

- Ship master
- Ship pilot
- Yacht skipper

This unit group excludes:

- Ship captain (2171)
- Marine superintendent (deck) (2171)
- Deckhand (8350)
- Helmsman (8350)

### 3154 **Air Traffic Controllers**

Air traffic controllers direct aircraft movements in airspace and on the ground, using radio, radar and lighting systems and provide information relevant to the operation of aircraft.

Tasks include:

- directing and controlling aircraft approaching and leaving airport and their movement on the ground
- directing and controlling aircraft operating in designated airspace sector
- examining and approving flight plans
- informing flight crew and operations staff about weather conditions, operational facilities, flight plans and air traffic
- applying knowledge of principles and practices of air traffic control in order to identify and solve problems arising in the course of their work
- initiating and organising emergency, search and rescue services and procedures
- directing activities of all aircraft and service vehicles on or near airport runways
- maintaining radio and telephone contact with adjacent control towers, terminal control units and other control centres and coordinating the movement of aircraft into adjoining areas

This unit group includes:

- Air traffic controller

### 3156 **Sea Traffic Controllers**

Sea traffic controllers command, navigate and direct ships, using radio and radar. They provide information and directions to ensure safe and efficient movement and operation of ships.

Tasks include:

- provide comprehensive information on the movement of ships to on-shore and ships' personnel
- commanding and navigating ships

- directing the movements of ships
- supervising waterborne transport operations
- co-ordinating and monitoring of en-route operations
- intervene to alert ships at sea traffic separation zone

This unit group includes:

- Sea traffic controller

### 3157 **Transport Operations Supervisors**

Transport operations supervisors supervise land, air and waterborne transport service operations.

Tasks include:

- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- co-ordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- MRT service supervisor
- Port operations supervisor

### 3159 **Transport Controllers and Related Workers Not Elsewhere Classified**

This unit group covers transport controllers and related workers not classified elsewhere in Minor Group 315 'Ship and aircraft controllers and technicians'.

This unit group includes:

- Port captain
- Air cargo officer

### 3160 **Premises and Parks Officers**

Park and premises officers are generally responsible for the implementation of the park management work plan and overseeing the programmes and activities in a park.

Tasks include:

- upkeep of an estate or park and be responsible for the proper management and maintenance of trees, shrubs and premises facilities
- maintaining high level of health and safety standards in the park/estate
- liaise with the residents' committees to create events and programmes to promote the use of parks
- providing information about the parks and their activities and programmes to park users
- performing administrative tasks such as record keeping of maintenance works schedule and report

- enforcing rules and regulations in parks and premises

This unit group includes:

- Premises maintenance officer
- Facilities maintenance officer
- Interiorscaper

### 3171 **Building and Fire Inspectors**

Building and fire inspectors enforce the rules and regulations relating to fire prevention and other hazards and occupational safety.

Tasks include:

- ensuring that buildings and other structures comply with approved building plans, grading and zoning laws and fire regulations
- advising on and inspecting fire-prevention systems
- investigating fire sites to determine cause of fire
- inspecting industrial and other enterprises on the grounds of occupational safety

This unit group includes:

- Fire and safety officer
- Landscape safety officer
- Playground safety officer

### 3172 **Quality and Safety Inspectors**

Quality and safety inspectors enforce the rules and regulations relating to safety of production processes, as well as quality standards relating to goods and services produced, used or sold. They may also administer and regulate quality standards manufacturing specifications.

Tasks include:

- performing road worthiness inspection on vehicles to ensure compliance with regulatory standards
- conducting checks, maintenance and housekeeping of inspection lanes
- ensuring safety of production processes, as well as of goods produced, used or sold
- ensuring compliance with workplace occupational safety rules and regulations
- ensuring compliance with the quality standards and specifications of manufacturers

This unit group includes:

- Factory inspector (occupational safety)
- Vehicle inspector (government)
- Machinery inspector (government)



**3211 Medical Imaging and Therapeutic Equipment Technicians**

Medical imaging and therapeutic equipment technicians test and operate radiographic, ultrasound and other medical imaging equipment to produce images of body structures for the diagnosis and treatment of injury, disease and other impairments.

Tasks include:

- explaining procedures, observing and positioning patients to ensure safety and comfort during examination, scan, or treatment
- using radiation safety measures and protection devices to comply with and to ensure safety of patients and health care workers
- position imaging or treatment equipment and adjusting controls to set exposure time and distancing according to specification
- operating or overseeing operation of radiologic, ultrasound and magnetic imaging equipment to produce images of the body for diagnostic purposes
- reviewing and evaluating developed x-rays, video tape, or computer generated information to determine if images are satisfactory for diagnostic purposes and recording results of procedures
- monitoring video display of area being scanned and adjusting density or contrast to improve picture quality
- monitoring patients' conditions and reactions, reporting abnormal signs to medical practitioner

This unit group includes:

- Sonographer
- Medical x-ray technician

This unit group excludes:

- Diagnostic radiologist (2214)
- Medical diagnostic radiographer (2269)
- Mammographer (2269)
- Radiation therapist (2269)

**3212 Medical and Pathology Laboratory Technicians**

Medical and pathology laboratory technicians perform clinical tests on specimens of bodily fluids and tissues in order to obtain information about the health of a patient or cause of death.

Tasks include:

- conducting chemical analysis of body fluids, including blood, urine, and spinal fluid to determine presence of normal and abnormal components
- operating, calibrating and maintaining equipment used in quantitative and qualitative analysis, such as spectrophotometers, calorimeters, flame photometers, and computer-controlled analysers
- entering data from analysis of laboratory tests and clinical results into records-keeping systems and reporting results to medical practitioners and other health professionals
- analysing samples of biological material for chemical content or reaction
- setting up, cleaning, and maintaining laboratory equipment

- analysing laboratory findings to check the accuracy of the results
- establishing and monitoring programmes to ensure the accuracy of laboratory results and developing, standardising, evaluating, and modifying procedures, techniques and tests used in the analysis of specimens
- obtaining specimens, cultivating, isolating and identifying micro-organisms for analysis
- examining cells stained with dye to locate abnormalities
- inoculating fertilised eggs, broths, or other bacteriological media with organisms

This unit group includes:

- Blood bank technician
- Medical laboratory technician
- Haematology technician
- Pathology technician

This unit group excludes:

- Medical pathologist (2214)
- Veterinary technician (3240)

### 3213 **Pharmacy Technicians**

Pharmacy technicians perform a variety of tasks associated with dispensing medicinal products under the guidance of a pharmacist or other health professional.

Tasks include:

- preparing medications and other pharmaceutical compounds under the guidance of pharmacists
- dispensing medicines and drugs to clients and giving written and oral instructions on their use, as prescribed by medical doctors, veterinarians or other authorised workers
- receiving prescriptions or refill requests from health professionals and verifying that information is complete and accurate
- maintaining proper storage and security conditions for drugs
- filling and labelling containers with prescribed medications
- assisting clients by answering questions, locating items or referring them to a pharmacist for medication information
- pricing and filing prescriptions that have been filled and establish and maintaining patient records including lists of medications taken by individual patients
- ordering, labelling and counting stock of medications, chemicals and supplies and entering inventory data into records-keeping systems
- cleaning and preparing equipment and containers used to prepare and dispense medicines and pharmaceutical compounds.

This unit group includes:

- Pharmacy technician

This unit group excludes:

- Pharmacist (2262)
- Pharmacology technician (3141)

**3214 Medical and Dental Prosthetic Technicians**

Medical and dental prosthetic technicians design, fit, service and repair medical and dental devices and appliances following prescriptions or instructions established by a health professional. They may service a wide range of support instruments to correct physical medical or dental problems such as neck braces, orthopaedic splints, artificial limbs, hearing aids, arch supports, dentures and dental crowns and bridges.

Tasks include:

- examining, interviewing and measuring patients in order to determine their appliance needs and to identify factors that could affect appliance fit
- conferring with medical and dental practitioners in order to formulate specifications and prescriptions for devices and appliances
- interpreting prescriptions or specifications to determine the type of product or device to be fabricated and the materials and tools that will be required
- making or receiving casts or impressions of patients' torsos, limbs, mouths or teeth for use as fabrication patterns
- designing and making orthotic and prosthetic devices using materials such as thermoplastic and thermosetting materials, metal alloys and leather, and hand and power tools
- fitting appliances and devices onto patients, testing and evaluating them, and making adjustments for proper fit, function, and comfort
- repairing, modifying and maintaining medical and dental prosthetic and supportive devices, according to specifications
- bending, forming and shaping fabric or material so that it conforms to prescribed contours needed to fabricate structural components
- fabricating full and partial dentures and constructing mouth guards, crowns, metal clasps, inlays, bridgework and other aids
- instructing patients in the use and care of prosthetic or orthotic devices

This unit group includes:

- Dental technician
- Orthopaedic technician
- Prosthetic technician
- Denturist
- Orthotist
- Prosthetist

This unit group excludes:

- Medical pathologist (2214)
- Veterinary technician (3240)

**Notes** Occupations included in this category normally require some medical, dental and anatomical and engineering knowledge obtained through formal training. Technicians who construct and repair precision medical and surgical instruments are not included here.

**3220 Nursing Associate Professionals**

Nursing associate professionals provide basic nursing and personal care for people in need of such care due to effects of ageing, illness, injury or other physical or mental impairment. They generally work under the supervision of, and in support of, implementation of health care, treatment and referrals plans established by medical, nursing and other health professionals.

Tasks include:

- providing nursing and personal care and treatment and health advice to patients according to care plans established by health professionals
- administering medications and other treatments to patients, monitoring patients' condition and responses to treatment, and referring patients and their families to a health professional for specialised care as needed
- cleaning wounds and applying surgical dressings
- updating information on patients' condition and treatments received in record-keeping systems
- assisting in planning and managing the care of individual patients
- assisting in giving first-aid treatment in emergencies

This unit group includes:

- Assistant nurse
- Enrolled nurse

This unit group excludes:

- Nursing aide (clinic, hospital) (5320)
- Healthcare assistant (5320)
- Veterinary nurse (3240)
- Registered nurse (2220)

### 3230 **Traditional and Complementary Medicine Associate Professionals**

Traditional and complementary medicine associate professionals prevent and treat human physical and mental illnesses, disorders and injuries using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures

Tasks include:

- examining and questioning patients to determine the nature of the illness or complaint and recommended course of treatment
- treating sickness and injuries using herbs, medicinal plants, insects, animal extracts and other traditional techniques to cure and heal by stimulating nature
- advising the individuals and the community on proper diet and behaviour to preserve or improve health and well-being
- applying pressure to parts of the body using a variety of traditional techniques
- referring patients to, and exchanging information with other health and community workers

This unit group includes:

- Traditional chinese medicine herbalist
- Faith healer
- Chiropodist
- Homeopath
- Naturopath

This unit group excludes:

- Traditional chinese medicine practitioner (2230)
- Acupuncturist (2230)

**3240 Veterinary Technicians and Assistants**

Veterinary technicians and assistants carry out advisory, diagnostic, preventive and curative veterinary tasks, more limited in scope and complexity than those carried out by, and with the guidance of veterinarians. They care for animals under treatment and in temporary residence at veterinary facilities, perform routine procedures and assist veterinarians to perform procedures and operations.

Tasks include:

- advising communities and individuals on the treatment of animals and their diseases and injuries
- conducting examinations of animals to make diagnoses or refer more difficult cases to veterinarians when needed
- treating ill or injured animals, especially for common diseases and disorders
- cleaning and sterilising examination tables and instruments and preparing materials used in the examination and treatment of animals
- carrying out technical tasks connected with artificial insemination of animals
- getting animals ready for examination or treatment and restraining or holding them during treatment
- assisting veterinarians to administer anaesthetics and oxygen during treatment
- placing animals in cages for recovery from operations and monitoring their condition
- producing radiographs, collecting samples, and performing other laboratory tests to assist in diagnosis of animal health problems
- performing routine animal dental procedures and assisting veterinarians with animal dentistry

This unit group includes:

- Veterinary technician
- Veterinary assistant
- Veterinary nurse

This unit group excludes:

- Chinese physician (2230)
- Acupuncturist (2230)

**3251 Dental Assistants and Therapists**

Dental assistants and therapists provide basic dental care services for the prevention and treatment of diseases and disorders of the teeth and mouth, as per care plans and procedures established by a dentist or other oral health professional.

Tasks include:

- advising communities and individuals on dental hygiene, diet and other preventive measures to reduce potential risks to oral health
- conducting visual and physical examinations of patients' mouths, teeth and related structures to assess oral health status
- identifying cases of patients with poor oral health or oral disease requiring referral to a dentist or other health professional
- assisting dentists during complex dental procedures

- providing fluoride treatments, cleaning and removing deposits from teeth, preparing cavities and placing fillings, administering local anaesthesia and performing other types of basic or routine clinical dental procedures
- preparing, cleaning and sterilising dental instruments, equipment and materials used in the examination and treatment of patients
- getting patients ready for examination or treatment including explaining procedures and correct positioning taking impressions of the mouth and dental radiographs to support diagnosis and fitting of dental prosthetics

This unit group includes:

- Dental therapist
- Oral health therapist
- Dental surgery assistant

This unit group excludes:

- Dentist (2261)
- Dental prosthetics maker and repairer (3214)
- Dental technician (3214)

### 3253 **Community Health Workers**

Community health workers provide health education, referral and follow-up, case management, basic preventive health care and home visiting services to specific communities. They provide support and assistance to individuals and families in navigating the health and social services system.

Tasks include:

- providing information to families and communities on a range of health issues including nutrition, hygiene, infant and child care, immunisations, family planning, risk factors and prevention of common infectious diseases, poisoning prevention, first aid for treatment of simple and common ailments, substance abuse, domestic violence, and other topics
- visiting families in their homes to provide information on the health, social and other services available and support them in gaining access to these services
- visiting families who do not usually access medical establishments to monitor on a regular basis certain conditions such as progress with pregnancy, child growth and development, and environmental sanitation
- distributing to households medical supplies for the prevention and treatment of endemic diseases such as malaria, pneumonia and diarrhoeal diseases, and instructing family and community members in the use of these products
- conducting outreach efforts to groups who do not usually access medical establishments with information and basic medical supplies for prevention and management of certain health conditions for which they are most at risk, such as HIV/AIDS and other communicable diseases
- collecting data from households and communities who do not usually access medical establishments for purposes of patient monitoring and referral and reporting to meet health regulations

This unit group includes:

- Community health aide
- Community health promoter
- Community health worker

This unit group excludes:

- Home care aide (5320)

#### 3254 **Opticians**

Opticians design, fit and dispense optical lenses based on a prescription from an ophthalmologist or optometrist for the correction of reduced visual acuity. They service corrective eyeglasses, contact lenses, low-vision aids and other optical devices.

Tasks include:

- examining and taking facial and eye measurements of clients for fitting of eyeglasses and other optical devices
- providing advice to clients with selection and maintenance of eyeglasses and frames, types of contact lenses and other optical devices for performance, safety, comfort and lifestyle
- interpreting optical prescriptions and preparing work order for optical laboratory for grinding and mounting of lenses in frames, preparation of contact lenses and other required work
- verifying exactness of finished optical appliances and devices to the original prescription and fit of clients

This unit group includes:

- Dispensing optician
- Refracting optician

This unit group excludes:

- Ophthalmologist (2214)
- Optometrist (2267)

#### 3255 **Physiotherapy Technicians and Related Associate Professionals**

Physiotherapy technicians and related associate professionals provide physical therapeutic treatments to patients in circumstances where functional movement is threatened by injury, disease or impairment. Therapies are usually provided according to rehabilitative plans established by a physiotherapist or other health professional.

Tasks include:

- administering manual treatments such as massage therapy or pressure point therapy
- administering electrical modality treatments, ultrasound and other physical therapies using specialised techniques and equipment
- instructing, motivating, safeguarding and assisting patients as they practise physical exercises, relaxation techniques and functional activities
- conferring with physiotherapists or other health care providers to evaluate patient information for planning, modifying, and coordinating treatment

- monitoring and recording patients' progress during treatment, including measuring their range-of-joint motion and vital signs
- fitting patients for orthopaedic braces, prostheses and other physical supportive devices such as crutches, and instructing patients in the use of such devices.

This unit group includes:

- Electrotherapist
- Massage therapist
- Sports masseur

This unit group excludes:

- Physiotherapist (2264)
- Occupational therapist (2268)
- Podiatrist (2269)
- Chiropractor (2269)
- Osteopath (2269)

### 3257 **Environmental and Occupational Health Inspectors**

Environmental and occupational health inspectors investigate the implementation of rules and regulations relating to environmental factors that can potentially affect human health, and occupational health in the workplace. They may implement and evaluate programmes to restore or improve occupational health and sanitary conditions under the supervision of a health professional.

Tasks include:

- advising employers and workers representatives on the implementation of government and other rules and regulations concerning occupational health and the working environment
- inspecting places of work to ensure that the working environment, machinery and equipment conform to government and other rules, regulations and standards related to sanitation and/or occupational and environmental health
- giving advice on environmental sanitary problems and techniques
- advising enterprises and the general public on the implementation of government and other rules and regulations concerning hygiene, sanitation, purity and grading of primary products, food, drugs, cosmetics and similar goods
- inspecting establishments to ensure that they conform to government and other rules and regulations concerning emission of pollutants and disposal of dangerous wastes
- initiating action to maintain or improve hygiene and prevent pollution of water, air, food or soil
- promoting preventive and corrective measures such as control of disease carrying organisms and of harmful substances in the air, hygienic food handling, proper disposal of waste and cleaning of public places
- estimating quantities and costs of materials and labour required for health, safety and sanitation remediation projects

This unit group includes:

- Environmental health inspector
- Hawker inspector (government)
- Sanitary inspector
- Occupational health inspector



This unit group excludes:

- Environmental officer (environmental public health) (2263)

### 3259 **Health Associate Professionals Not Elsewhere Classified**

This unit group covers health associate professionals not classified elsewhere in Sub-Major Group 32 'Health associate professionals'.

Tasks include:

- interviewing and examining patients to obtain information on their health status and the nature and extent of injury, illness or other physical or mental health condition
- recording information on patients' health status and responses to treatment in medical record-keeping systems
- referring clients to or conferring with other health professionals or associate professionals if required
- attending accidents, emergencies and requests for medical assistance
- assessing health of patients, determining need for assistance, and assessing specialised needs and factors affecting patients' conditions
- performing therapies and administering drugs according to protocol
- resuscitating and defibrillating patients and operating life-support equipment
- transporting accident victims to medical facilities
- transporting sick and disabled persons to and from medical facilities for specialised treatment and rehabilitation
- instructing community groups and essential service workers in first aid
- attending public gatherings and sporting events where accidents and other health emergencies may occur

This unit group includes:

- Paramedic

This unit group excludes:

- Ambulance driver (8322)

### 3312 **Credit and Loans Officers**

Credit and loan officers analyse and evaluate financial information on applications for credit and loans and determine approval or disapproval of the client for the credit or loan or recommend to management approval or disapproval.

Tasks include:

- interviewing applicants for personal, mortgage, student and business loans
- researching and evaluating loan applicant's financial status, references, credit and ability to repay the loan
- submitting credit and loan applications to management with recommendations for approval or rejection or approve or reject applications within authorised limits ensuring that credit standards of the institution are respected
- keeping records of payments, and preparing routine letters requesting payment for overdue accounts and forwarding these for legal action
- completing credit and loan documentation

This unit group includes:

- Credit officer
- Loans officer

### 3313 **Accounting Associate Professionals**

Accounting associate professionals maintain complete records of financial transactions of an undertaking and verify accuracy of documents and records relating to such transactions.

Tasks include:

- maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from accountants
- verifying accuracy of documents and records relating to payments, receipts and other financial transactions
- preparing financial statements and reports for specified periods
- applying knowledge of bookkeeping principles and practices in order to identify and solve problems arising in the course of their work
- performing related tasks

This unit group includes:

- Assistant accountant
- Audit (accounting) executive
- Gaming audit officer

This unit group excludes:

- Accountant (2411)
- Bookkeeper (4311)
- Accounts clerk (4311)
- Audit assistant (4311)

### 3315 **Valuers and Loss Assessors**

Valuers and loss assessors value property and various goods and assess losses covered by insurance policies.

Tasks include:

- determining the quality or value of raw materials, real estate, industrial equipment, personal and household effects, works of art, gems, intellectual property and other objects
- assessing the extent of damage or loss and liabilities of insurance companies and underwriters for losses covered by insurance policies
- obtaining records of sales and value of similar items or property
- inspecting items or property to evaluate condition, size and construction
- preparing reports of value, outlining the estimation factors and methods used

This unit group includes:

- Appraiser
- Valuer
- Insurance assessor
- Loss assessor

- Claims adjuster
- Claims inspector

This unit group excludes:

- Auctioneer (3339)

### 3321 **Insurance Representatives and Related Associate Professionals**

Insurance representatives and related associate professionals advise on and sell life, accident, automobile, liability, endowment, fire, marine and other types of insurance to new and established clients.

Tasks include:

- obtaining information about customers' circumstances necessary to determine appropriate type of insurance and conditions
- negotiating with customers to determine type and degree of risk for which insurance is required
- explaining details of insurance and conditions, risk coverage premiums and benefits to customers
- assisting clients to determine the type and level of coverage required, calculating premiums and establishing method of payment

This unit group includes:

- Financial planner
- Insurance agent
- Insurance broker

This unit group excludes:

- Actuary (2121)
- Insurance assessor (3315)
- Insurance clerk (4312)
- Securities dealer (2414)
- Insurance underwriter (2415)

### 3322 **Commercial and Marketing Sales Executives**

Commercial and marketing sales executives represent companies to sell various goods and services to businesses and other organisations and provide specific information as required.

Tasks include:

- soliciting orders and selling goods to retail, industrial, wholesale and other establishments
- selling equipment, supplies and related services to business establishments or individuals
- obtaining and updating knowledge of market conditions and of employer's and competitors' goods and services
- providing prospective customers with information about the characteristics and functions of the products and equipment for sale, and demonstrating its use or qualities
- quoting prices and credit terms, recording orders and arranging deliveries

- reporting customers' reactions and requirements to suppliers and manufacturers
- following up with clients to ensure satisfaction with products purchased

This unit group includes:

- Business development executive
- Marketing executive
- After-sales service advisor

This unit group excludes:

- Technical sales professional (2433)
- Medical and pharmaceutical products sales professionals (2433)
- ICT sales professionals (2433)
- Sales professionals (institutional sales of financial products)(2433)
- Shop sales assistant (5220)
- Door-to-door salesperson (5242)

### 3323 **Buyers and Purchasing Agents**

Buyers and purchasing agents buy goods and services for use or resale on behalf of industrial, commercial, government or other establishments and organisations.

Tasks include:

- determining or negotiating contract terms and conditions, awarding supplier contracts or recommending contract awards for the purchase of equipment, raw materials products, services and the purchasing of merchandise for resale
- obtaining information about requirements and stock and developing specifications for quantity and quality to be purchased, costs, delivery dates and other contract conditions
- purchasing general and specialised equipment, materials or business services for use or for further processing by their establishment
- inviting tenders, consulting with suppliers and reviewing quotations
- purchasing merchandise for resale by retail or wholesale establishments
- studying market reports, trade periodicals and sales promotion materials and visiting trade shows, showrooms, factories and product design events
- selecting the merchandise or products that best fit the establishment's requirements
- interviewing suppliers and negotiating prices, discounts, credit terms and transportation arrangements
- overseeing distribution of merchandise to outlets and maintaining adequate stock levels
- establishing delivery schedules, monitoring progress and contacting clients and suppliers to resolve problems

This unit group includes:

- Buyer
- Merchandise purchaser
- Procurement agent
- Technical purchaser

This unit group excludes:

- Commodities broker (2414)

**3329 Sales and Related Associate Professionals Not Elsewhere Classified**

This unit group covers sales and related associate professionals not classified elsewhere in Minor Group 332 'Sales and related associate professionals'. This unit group includes those helping clients to acquire, sell, license intellectual property, which includes patents, trademarks, copyrights, etc.

**3331 Shipping, Clearing and Forwarding Agents**

Shipping, clearing and forwarding agents carry out customs clearing procedures and ensure that insurance, export/import licenses and other formalities are in order.

Tasks include:

- carrying out customs clearing procedures for exports or imports
- ensuring that insurance is in order
- ensuring that export/import licences and other formalities are in order
- signing and issuing bills of lading
- checking import/export documentation to determine cargo contents, and classifying goods into different fee or tariff groups, using a tariff coding system

This unit group includes:

- Clearing agent
- Forwarding agent
- Shipping agent

**3332 Conference and Event Planners**

Conference and event planners organise and coordinate services for conferences, events, functions, banquets and seminars.

Tasks include:

- promoting conferences, conventions and trade shows to potential customers
- responding to inquiries concerning services provided and costs for room and equipment hire, catering and related services
- meeting with clients to discuss their needs and outlining package options to meet these needs
- arranging and coordinating services, such as conference facilities, catering, signage, displays, audiovisual and computer equipment, accommodation, transport and social events, for participants, logistical arrangements for presenters
- organising registration of participants
- negotiating the type and costs of services to be provided within budget
- overseeing work by contractors and reporting on variations to work orders

This unit group includes:

- Convention/exhibition coordinator
- Event planner

**3333 Employment Agents and Labour Contractors**

Employment agents and contractors match jobseekers with vacancies, find workers for employers and contract labour for particular projects at the request of enterprises and other organisations including government, institutions, or find places for jobseekers for a commission.

Tasks include:

- matching jobseekers with vacancies
- finding workers for vacant posts against a commission from the employer or worker
- discussing with enterprises/organisations the needed skills and other characteristics of the workers to be employed or contracted
- finding workers with appropriate skills and undertaking the necessary formalities according to national or international regulations and requirements
- ensuring that the employment contracts meet legal requirements and signing them
- advising on training schemes

This unit group includes:

- Employment agent
- Labour contractor

This unit group excludes:

- Literary agent (3339)
- Theatrical agent (3339)
- Sports agent (3339)
- Executive search consultant (2423)

**3334 Real Estate Agents**

Real estate agents arrange the sale, purchase, rental and lease of real property, usually on behalf of clients and on a commission basis.

Tasks include:

- obtaining information about properties to be sold or leased, the circumstances of their owner and the needs of prospective buyers or tenants
- showing properties to be sold or leased to prospective buyers or tenants and explaining terms of sale or conditions of rent or lease
- arranging signing of lease agreements and transfer of property rights
- collecting rent and bond monies on behalf of owner and inspecting properties before, during and after tenancies
- ensuring the availability of workers to perform maintenance of the properties

This unit group includes:

- Property agent
- Estate agent
- Realtor

This unit group excludes:

- Mortgage clerk (4312)

**3339 Business Services Agents Not Elsewhere Classified**

This unit group covers business services agents not classified elsewhere in Minor Group 333 'Business services agents'. For instance, those who establish business contacts, sell business services such as advertising space in the media, arrange contracts for performances of athletes, entertainers and artists, as well as for the publication of books, the production of plays, or the recording, performing and sale of music are classified here. Also included are those selling objects, properties and goods by auction.

Tasks include:

- obtaining information about services to be sold and needs of prospective buyers
- negotiating contracts on behalf of seller or buyer and explaining terms of sale and payment to client
- signing agreements on behalf of seller or buyer and ensuring that contract is honoured
- making sure that the business service purchased is made available to the buyer in the agreed format at the agreed time
- selling by auction various kinds of property, cars, commodities, livestock, art, jewellery and other objects
- organising or conducting a casino marketing arrangement

This unit group includes:

- Auctioneer
- Advertising representative/salesman
- Literary agent
- Sports agent
- International market agent/representative
- Junket operator

**3345 Human Resource Associate Professionals**

Human resource associate professionals plan, develop, implement and evaluate human resource policies and programmes to develop human resources to meet organisational objectives.

Tasks include:

- identifying training needs and requirements of individuals and organisations
- oversees and implement human resource functions such as recruitment, compensation and training
- setting human resource development objectives and evaluating learning outcomes
- preparing and developing instructional training material and aids such as handbooks, visual aids, online tutorials, demonstration models, and supporting training reference documentation
- designing, coordinating, scheduling and conducting training and development programmes that can be delivered in the form of individual and group instruction, and facilitating workshops, meetings, demonstrations and conferences
- liaising with external training providers to arrange delivery of specific training and development programmes
- monitoring and performing ongoing evaluation and assessment of internal and external training quality and effectiveness, and reviewing and modifying training objectives, methods and course deliverables

This unit group includes:

- Human resource/personnel officer
- Training officer
- Industrial relations officer
- Placement officer
- Ship crewing officer

This unit group excludes:

- Human resource consultant (2423)
- Executive search consultant (2423)

### 3349 **Administrative and Related Associate Professionals Not Elsewhere Classified**

This unit group covers administrative and related associate professionals not elsewhere classified in Minor Group 334 'Administrative associate professionals'. For instance, management executives carrying out general, non-specialised duties and various finance and banking operations executives are classified here.

This unit group includes:

- Banking compliance executive
- Management executive (general)
- Trade finance executive
- Operations officer (except transport operations)

### 3351 **Customs and Immigration Officers**

Customs and immigration officers check persons, vehicles and goods crossing national borders to administer and enforce relevant government rules and regulations.

Tasks include:

- patrolling national borders and coastal waters to stop persons from illegally entering or leaving the country and from illegally importing or exporting currency or goods
- checking travel documents of persons crossing national borders to ensure that they have the necessary authorisations and certificates
- inspecting the luggage of persons crossing national borders to ensure that it conforms to government rules and regulations concerning import or export of goods and currencies
- examining transport documents and freight of vehicles crossing national borders to ensure conformity with government rules and regulations concerning goods in transit and the import and export of goods and to verify that necessary payments have been made
- detaining persons and seizing prohibited and undeclared goods found to be in violation of immigration and customs laws
- co-ordinating and co-operating with other agencies involved in law enforcement, deportation and prosecution
- performing related administrative tasks to record findings, transactions, violations and determinations
- when necessary, testifying in a court of law about the circumstances and results of investigations carried out



This unit group includes:

- Customs officer/inspector
- Border officer/border
- Immigration officer

### 3355 **Police Inspectors**

Police inspectors manage and supervise a team of police officers. Police inspectors maintain law and order, investigate crimes and handle queries from the public. They may be rotated amongst investigation, command and staff postings.

Tasks include:

- manage and supervise teams of police officers
- making arrests
- analysing evidence in order to solve crimes, identify criminal activity and gather information for court cases
- undertake planning work for police operations

This unit group includes:

- Police inspector

This unit group excludes:

- Police officer (5412)
- Police commissioner (1112)

### 3359 **Government Associate Professionals Not Elsewhere Classified**

This unit group covers government associate professionals not elsewhere classified in Minor Group 335 'Government associate professionals'.

Tasks include:

- examining tax returns, bills of sale and other relevant documents to determine type and amount of taxes, duties and other types of fees to be paid
- advising individuals and organisations on government laws, rules and regulations concerning government benefit programmes and the determination and disbursement of payments or referral to services, as well as on the public's rights and obligations
- examining places of business to ensure the use of correct weights and measures in trade
- monitoring price regulations to assess appropriateness of costs for goods and services to protect consumer interests
- monitoring wage regulations to ensure appropriate levels of pay for work performed and to assess compliance with employment standards legislation
- performing related investigative and administrative tasks to record findings, document compliance problems or inappropriate business practices and to prepare reports and correspondence

This unit group includes:

- Tax officer
- Excise officer
- Social benefits officer

This unit group excludes:

- Fire and safety officer (3171)
- Fire prevention specialist (3171)
- Vehicle inspector (government) (3172)
- Safety inspector (government) (3172)

### 3411 **Legal Associate Professionals**

Legal associate professionals perform support functions in courts of law or in law offices, provide services related to such legal matters as insurance contracts, intellectual property, the transferring of property and the granting of loans and other financial transactions or conduct investigations for clients.

Tasks include:

- documenting court proceedings and judgements
- preparing legal documents including trial briefs, pleadings, appeals, wills and contracts and preparing, papers summarising legal positions, or setting out conditions of loans or insurance
- examining documentation such as mortgages, liens, judgements, easements, contracts and maps in order to verify properties, legal descriptions and ownership
- preparing documents relating to transfer of real estate, stocks or other matters requiring formal registration

This unit group includes:

- Paralegal
- Conveyance executive

This unit group excludes:

- Lawyer (2611)
- Judge (2612)

### 3412 **Social Work Associate Professionals**

Social work associate professionals administer and implement social assistance programmes and community services and assist clients to deal with personal and social problems.

Tasks include:

- collecting information relevant to clients needs and assessing their relevant skills, strengths and deficits
- helping physically or mentally handicapped persons to obtain services and to improve their ability to function in society
- assisting clients to identify options and develop plans of action while providing necessary support and assistance
- assisting clients to identify and access community resources including legal, medical and financial assistance, housing, employment, transportation, assistance with moves, day care and other referral services
- participating in the selection and admission of clients to appropriate programmes
- providing crisis intervention and emergency shelter services

- implementing life skills workshops, substance abuse treatment programmes, behaviour management programmes, youth services programmes and other community and social service programmes under the supervision of social work or health care professionals
- assisting in evaluating the effectiveness of interventions and programmes by monitoring and reporting on clients' progress
- maintaining contact with other social service agencies, schools and health care providers involved with clients to provide information and obtain feedback on clients' overall situation and progress

This unit group includes:

- Youth worker
- Child care inspector
- Community development worker
- Welfare support officer
- Mental health worker

This unit group excludes:

- Family counsellor (2635)
- Social worker (2635)
- Parole officer (2635)
- Probation officer (2635)

#### 3421 **Athletes and Sportsmen**

Athletes and sportsmen participate in competitive sporting events. They train, compete, either individually or as part of a team in their chosen sport.

Tasks include:

- participating in competitive sporting events
- participating in regular practice and training sessions and undertaking private training to maintain the required standard of fitness
- undertaking sports promotional activities and media interviews
- maintaining a high degree of expertise in a particular sport
- deciding on strategies in consultation with coaches
- assessing other competitors and conditions at venues
- competing in sporting events
- adhering to the rules and regulations associated with a specific sport

This unit group includes:

- Athlete
- Boxer
- Motor-racing driver
- Football player
- Golfer
- Jockey
- Sparring partner

**3422 Sports Coaches, Instructors, Officials and Other Related Associate Professionals**

Sports coaches, instructors and officials work with amateur and professional sportspersons to enhance performance, encourage greater participation in sport, and organise and officiate in sporting events according to established rules.

Tasks include:

- identifying strengths and weaknesses of athletes or teams
- planning, developing and implementing training and practice sessions
- developing, planning and co-ordinating competitive schedules and programmes
- motivating and preparing athletes or teams for competitive events or games
- formulating competitive strategy, developing game plans and directing athletes and players during games or athletic events
- analysing and evaluating athletes' or teams' performances and modifying training programmes
- monitoring and analysing technique and performance, and determining how future improvements can be made
- officiating at sporting events or athletic competitions to maintain standards of play and to ensure that game rules and safety regulations are observed
- recording lapsed time and keeping scores during events or competitions
- judging the performance of competitors, awarding points, imposing penalties for infractions and determining results
- compiling scores and other athletic records

This unit group includes:

- Sports coach
- Athletic coach
- Golf teacher
- Martial arts instructor
- Fitness instructor
- Adventure training instructor
- Scuba diving instructor
- Referee (sports)
- Judge (sports)
- Steward (race track)
- Umpire (sports)

**3431 Photographers**

Photographers operate still cameras to photograph people, events, scenes, materials, products and other subjects.

Tasks include:

- taking photographs for advertising, or other commercial, industrial or scientific purposes and to illustrate stories and articles in newspapers, magazines and other publications
- taking portrait photographs of persons and groups of persons
- studying requirements of a particular assignment and decide on type of camera, film, lighting and background accessories to be used determining picture composition, making technical adjustments to equipment and photograph subject
- operating scanners to transfer photographic images to computers

- operating computers to manipulate photographic images
- adapting existing photographic images to create new digitised images to be included in multimedia products
- using airbrush, computer or other techniques to create the desired visual effect

This unit group includes:

- Advertising photographer
- Commercial photographer
- Industrial photographer
- Fashion photographer
- News photographer
- Photo-journalist
- Sports photographer
- Aerial photographer

This unit group excludes:

- Video camera operator (3521)
- Television camera operator (3521)
- Director of photography (motion picture) (3521)
- Camera repairer (7311)
- Photogravure photographer (7321)
- Photolithographer (7321)

#### 3432 **Interior Designers and Decorators**

Interior designers and decorators plan and design commercial, industrial, public, retail and residential building interiors and surrounding landscape to produce an environment tailored to a purpose, taking into consideration factors that enhance living and working environments and sales promotion. They coordinate and participate in their construction and decoration.

Tasks include:

- determining the objectives and constraints of the design brief by consulting with clients and stakeholders
- researching and analysing spatial, functional, efficiency, safety and aesthetic requirements
- formulating design concepts for the interiors of buildings and their surrounding landscape
- preparing sketches, diagrams, illustrations and plans to communicate design concepts
- negotiating design solutions with clients, management, suppliers and construction staff
- selecting, specifying and recommending functional and aesthetic materials, furniture and products for interiors and landscapes
- detailing and documenting selected design for construction;
- coordinating the construction and the decoration of interiors and surrounding landscapes
- designing and painting stage scenery
- designing and decorating show windows and other display areas to promote products and services

This unit group includes:

- Interior designer
- Landscape designer
- Display artist
- Exhibition designer
- Window display designer

This unit group excludes:

- Building architect (2161)
- Landscape architect (2162)

### 3433 **Gallery, Museum and Library Technicians**

Gallery, museum and library technicians prepare artworks, specimens and artifacts for collections, arrange and construct gallery exhibits, and assist librarians to organise and operate systems for handling recorded material and files.

Tasks include:

- mounting and preparing objects for display
- designing and arranging exhibit furnishings, display cases and display areas
- assisting in setting up lighting and display equipment
- receiving, shipping, packing and unpacking exhibits
- ordering new library materials and maintaining library records and circulation systems
- cataloguing printed and recorded material
- entering data into databases and editing computer records
- operating audiovisual and reprographic equipment
- searching and verifying bibliographic data

This unit group includes:

- Gallery technician
- Museum technician
- Library technician
- Naturalist
- Taxidermist

### 3434 **Chefs**

Chefs design menus, create dishes and oversee the planning, organisation, preparation and cooking of meals in hotels, restaurants and other eating places, on board ships, on passenger trains and in private households.

Tasks include:

- planning and developing recipes and menus, estimating food and labour costs, and ordering food supplies
- monitoring quality of dishes at all stages of preparation and presentation
- discussing food preparation issues with managers, dietitians, kitchen and waiting staff
- supervising and coordinating the activities of cooks and other workers engaged in food preparation
- inspecting supplies, equipment, and work areas to ensure conformance to established standards

- determining how food should be presented, and creating decorative food displays
- instructing cooks and other workers in the preparation, cooking, garnishing, and presentation of food
- participating in the recruitment of kitchen staff and monitoring their performance
- preparing, seasoning and cooking speciality foods and complex dishes
- explaining and enforcing hygiene and food safety regulations

**3439 Artistic and Cultural Associate Professionals Not Elsewhere Classified**

This unit group covers artistic and cultural associate professionals not classified elsewhere in Minor Group 343 'Artistic and cultural associate professionals'. For instance, people who assist directors or actors with staging of motion picture, television or commercial productions are classified here.

This unit group includes:

- Tattooist
- Lighting technician
- Stage technician

**3440 Creative and Performing Arts Associate Professionals**

Creative and performing arts related associate professionals entertain audiences by performing a variety of acts.

Tasks include:

- performing amusing antics and telling funny stories
- performing tricks of illusion and sleight of hand, and feats of hypnotism
- performing difficult and spectacular acrobatics, and gymnastic or juggling feats
- training and performing with animals

This unit group includes:

- Clown
- Aerialist
- Conjuror
- Disc jockey
- Illusionist
- Magician
- Acrobat
- Tight-rope walker
- Ventriloquist

**3511 Computer Systems Operators**

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

Tasks include:

- operating and controlling peripheral and related computer equipment
- entering commands, using computer terminal, and activating controls on computer and peripheral equipment to integrate and operate equipment

- monitoring systems for equipment failure or errors in performance
- notifying supervisor or maintenance technicians of equipment malfunctions
- responding to programme error messages by finding and correcting problems, escalating the problem to other staff or terminating the programme
- reading job set-up instructions to determine equipment to be used, order of use, material such as disks and paper to be loaded, and control settings
- retrieving, separating and sorting programme output as needed, and sending data to specified users
- loading peripheral equipment, such as printers, with selected materials for operating runs, or oversee
- loading of peripheral equipment by peripheral equipment operators

This unit group includes:

- Electronic computer operator (mainframe)
- Computer operator
- Electronic data processing supervisor

This unit group excludes:

- Computer technician (3512)

### 3512 **Computer Technicians**

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

Tasks include:

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

This unit group includes:

- Computer systems technician
- IT user helpdesk technician
- Information technology field engineer
- Computer network technician
- Computer database assistant



This unit group excludes:

- Computer system operator (3511)

#### 3514 **Website Administrators**

Website administrators maintain, monitor and support the optimal functioning of internet and intranet website and web server hardware and software.

Tasks include:

- installing, monitoring and supporting the reliability and usability of Internet and Intranet websites or web server hardware or software
- developing and maintaining documentation, policies and instructions, recording operational procedures and system logs
- developing, coordinating, implementing and monitoring security measures
- analysing and making recommendations to enhance performance, including upgrading and acquiring new systems
- liaising with, and providing guidance to, clients and users
- modifying web pages
- performing web server backup and recovery operations

This unit group includes:

- Website administrator
- Webmaster
- Website technician

#### 3521 **Broadcasting Technicians and Audio-Visual Operators**

Broadcasting and audio-visual technicians control technical functioning of equipment to record and edit images and sound and for transmitting radio and television broadcasts of images and sounds.

Tasks include:

- controlling equipment to record sound
- controlling equipment to edit and mix image and sound recordings to ensure satisfactory quality and to create special image and sound effects
- applying knowledge of principles and practices of image and sound recording and editing in order to identify and solve problems
- controlling transmitting and broadcast systems and satellite systems for radio and television programmes

This unit group includes:

- Video camera operator
- Television camera operator
- Radio and television studio equipment operator
- Sound recording equipment operator
- Sound editor (motion picture film)
- Dubbing machine operator
- Cinema projectionist
- Microphone operator

This unit group excludes:

- Photographer (3431)

### 3522 **Telecommunications Engineering Technicians**

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

Tasks include:

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

This unit group includes:

- Telecommunications technician

This unit group excludes:

- Electronics engineering technician (3114)
- Telecommunications and telephone installer (7422)
- Telecommunications and telephone mechanic (7422)
- Telecommunications and telephone lineman (7422)

### 3523 **Telecommunications Equipment Operators**

Telecommunications equipment operators control technical functioning of equipment in order to broadcast or transmit telecommunication signals on land, sea or in aircraft.

Tasks include:

- controlling radio communications systems, satellite services, and multiplex systems on land, sea or in aircraft
- applying knowledge of principles and practices of broadcasting, telecommunications terminals and transmissions systems, in order to identify and solve problems
- making emergency repairs to equipment

This unit group includes:

- Telecommunications service supervisor
- Ship's radio officer
- Flight radio officer
- Telegrapher

**3529 Optical and Electronic Equipment Operators Not Elsewhere Classified**

This unit group covers optical and electronic equipment operators not classified elsewhere in Minor Group 352 'Telecommunications and broadcasting technicians and audio-visual operators'.

**3610 Pre-Primary Education Teachers**

Pre-primary education teachers promote the social, physical, and intellectual development of children below primary school age through the provision of educational and play activities.

Tasks include:

- planning and organising individual and group activities designed to facilitate the development of children's motor skills, cooperative and social skills, confidence and understanding
- promoting language development through story-telling, role-play, songs, rhymes and informal conversations and discussions
- leading children in activities that provide opportunities for creative expression through the media of art, dramatic play, music and physical fitness
- observing children in order to evaluate progress and to detect signs of developmental, emotional or health related problems with parents
- observing and assessing nutritional health, welfare and safety needs of students and identifying factors which may impede students' progress
- supervising children's activities to ensure safety and resolve conflicts
- guiding and assisting children in the development of proper eating, dressing and toilet habits
- discussing progress or problems of children with parents and other staff members and identifying appropriate actions and referrals to other services
- establishing and maintaining collaborative relationships with other service providers working with young children

This unit group includes:

- Child care teacher
- Kindergarten teacher
- Pre-primary school teacher

**3620 Extracurriculum Instructors**

Extracurriculum instructors teach non-native languages for migration and related purposes; give private tuition; teach arts, information technology and other subjects outside the mainstream primary, secondary and higher education systems.

Tasks include:

- teaching non-native languages for migration or other purposes
- teaching students in practice, theory and performance of music, drama, dance, visual and other arts
- developing, scheduling and conducting training programmes and courses for information technology users.

This unit group includes:

- Language school teacher
- Flower arrangement teacher
- Calligraphy teacher
- Crafts teacher (private tuition)
- Music teacher (private tuition)
- Singing teacher (private tuition)
- Dance instructor (extracurriculum)
- Speech teacher (private tuition)
- Computer teacher (computer training school)

This unit group excludes:

- University lecturer (2310)
- Vocational school teacher (2330)
- Secondary school teacher (2340)
- Primary school teacher (2350)
- Educational psychologist (2634)
- Private tutors (3691)

### 3691 **Private Tutors**

Private tutors provide private tuition to schoolchildren in academic subjects, usually at the latter's homes or at tuition centres.

Tasks include:

- assessing students' level of ability and determining learning needs
- planning, preparing and delivering programmes of study, lessons and workshops for individual and groups of students
- preparing and presenting material on the theory of the subject area being studied
- instructing and demonstrating practical aspects of the subject area being studied
- assigning exercises and work relevant to students' level of ability, interests and aptitude
- assessing students and offering advice, criticism and encouragement
- revising curricula, course content, course materials and methods of instruction
- preparing students for examinations and assessments

This unit group includes:

- Private tutor (academic)

This unit group excludes:

- Language school teacher (3620)
- Flower arrangement teacher (3620)
- Calligraphy teacher (3620)
- Crafts teacher (private tuition) (3620)
- Music teacher (private tuition) (3620)
- Singing teacher (private tuition) (3620)
- Dance instructor (extracurriculum) (3620)
- Speech teacher (private tuition) (3620)

**3699 Teaching Associate Professionals Not Elsewhere Classified**

This unit group covers teaching associate professionals not elsewhere classified in Sub-Major Group 36 'Teaching associate professionals'. For instance, relief teachers that provide teaching cover in the absence of teachers are classified here.

Tasks include:

- maintaining discipline and order in the classroom
- delivering pre-prepared programmes of study, lessons and workshops

This unit group includes:

- Relief teachers

**3991 Religious Associate Professionals**

Religious associate professionals provide support to ministers of religion or to a religious community, undertake religious works, and preach and propagate the teachings of a particular religion.

Tasks include:

- undertaking religious works
- preaching and propagating the teachings of a particular religious faith
- assisting at services of public worship and religious rites
- providing religious education, spiritual guidance and moral support to individuals and communities
- administering and participating in programmes to provide food, clothing and shelter to those in need

This unit group includes:

- Layworker
- Medium
- Monk
- Nun
- Preacher (non-ordained)

**3999 Other Associate Professionals Not Elsewhere Classified**

This unit group covers associate professionals not elsewhere classified in Major Group 3 'Associate professionals and technicians'.

**4000 Clerical Supervisors**

Clerical supervisors supervise the clerical activities of a distinct unit within an establishment. The unit could be responsible for duties in connection with general administration, data collection, money-handling operations, travel arrangements, requests for information, coordination activities and appointments.

Tasks include:

- estimating manpower requirements and assigning duties to workers
- analysing and resolving work problems
- coordinating work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- Chief clerk (general office)
- Wages section supervisor
- Market research supervisor

This unit group excludes:

- Cage/Count supervisor (5230)

**4110 General Office Clerks**

General office clerks perform a wide range of general duties, mostly connected with the keeping of office records and routine aspects of legal matters and personnel records.

Tasks include:

- recording, preparing, sorting, classifying and filing information
- keeping address and mailing lists
- sorting, opening and sending mail
- photocopying and faxing documents
- preparing reports and correspondence of a routine nature
- recording issue of equipment to staff
- responding to telephone or electronic enquiries or forwarding to appropriate person
- checking figures, preparing invoices and recording details of financial transactions made
- transcribing information onto computers and proofreading and correcting copy
- keeping personnel or any other office records

This unit group includes:

- Office clerk (general)
- Clerical assistant
- Filing clerk
- Personnel clerk

This unit group excludes:

- Library assistant (4411)

**4120 Secretaries and Verbatim Reporters**

Secretaries and verbatim reporters use typewriters, personal computers or other word-processing equipment to transcribe correspondence and other documents in court hearings and other official committees and meetings, check and format documents prepared by other staff, deal with incoming and outgoing mail, screen requests for meetings or appointments and perform a variety of administrative support tasks.

Tasks include:

- checking, formatting and transcribing correspondence, minutes and reports from dictation, electronic documents or written drafts to conform to office standards, using typewriter, personal computer or other word processing equipment
- using various computer software packages including spreadsheets to provide administrative support
- dealing with incoming or outgoing mail
- scanning, recording and distributing mail, correspondence and documents
- screening requests for meetings or appointments and helping to organise meetings
- screening and recording leave and other staff-members' entitlements
- organising and supervising filing systems
- dealing with routine correspondence on their own initiative

This unit group includes:

- Personal assistant
- Stenographic secretary
- Court reporter

This unit group excludes:

- Organising secretary (community centre) (3412)

**4131 Typists and Word Processing Operators**

Typists and word processing operators input and process text and data; prepare, edit and generate documents for storage, processing, publication and transmission.

Tasks include:

- typing written material from rough drafts, corrected copies, voice recordings, or shorthand using a computer, word processor or typewriter
- checking completed work for proper spelling, grammar, punctuation and formatting
- gathering and arranging the material to be typed, following instructions
- filing and storing completed documents on computer hard drive or disk, or maintain a computer filing system to store, retrieve or update documents
- transcribing information recorded in shorthand and on sound recording equipment

This unit group includes:

- Stenographer
- Typist
- Teletypist

**4132 Data Entry Clerks**

Data entry clerks enter coded, statistical, financial and other numerical data into electronic equipment, computerised databases, spreadsheets or other data repositories using a keyboard, mouse, or optical scanner, speech recognition software or other data entry tools. They enter data into mechanical and electronic devices to perform mathematical calculations.

Tasks include:

- receiving and registering invoices, forms, records and other documents for data capture
- entering numerical data, codes and text from source material into computer-compatible storage and processing devices
- verifying accuracy and completeness of data and correcting entered data, if needed
- operating bookkeeping and calculating machines
- importing and exporting data between different database systems and software

This unit group includes:

- Data entry operator

**4211 Bank Tellers and Other Counter Clerks**

Bank tellers and other counter clerks deal directly with clients of banks or post offices in connection with receiving, changing and paying out money or providing mail services.

Tasks include:

- processing customer cash deposits and withdrawals, cheques, transfers, bills, credit card payments, money orders, certified cheques and other related banking transactions
- crediting and debiting clients' accounts
- paying bills and making money transfers on clients' behalf
- receiving mail, selling postage stamps and conducting other post office counter business such as bill payments, money transfers and related business
- changing money from one currency to another, as requested by clients
- making records of all transactions and reconciling them with cash balance

This unit group includes:

- Bank teller
- Post office counter clerk
- Money changer

This unit group excludes:

- Store cashier (5230)



**4213 Pawnbrokers and Moneylenders**

Pawnbrokers and moneylenders lend money against articles deposited as pledges, or against property or other security.

Tasks include:

- evaluating articles offered as pledges, calculating interest and lending money
- returning articles when the loan is paid or, in the event of non-payment, selling pledged articles
- lending money as personal loans against success of future harvest and other similar undertakings
- collecting loans when the pledge involved the success of future harvest and other similar undertakings
- keeping a record of items received and money distributed and received

This unit group includes:

- Pawnbroker
- Moneylender

**4214 Bill Collectors and Related Workers**

Bill collectors and related workers collect payments on overdue accounts and bad cheques and collect charity payments.

Tasks include:

- tracing and locating debtors
- telephoning, visiting, or writing to customers to collect money or arrange for later payments
- preparing reports including amounts collected and maintaining records and files related to collection work
- recommending legal action or discontinuation of service when payment cannot be otherwise obtained
- asking for and collecting charity payments

This unit group includes:

- Bill collector
- Rent collector
- Toll collector

This unit group excludes:

- Store cashier (5230)

**4221 Travel Agency and Related Clerks**

Travel agency and related clerks supply information, arrange travel itineraries, obtain travel and accommodation reservations and organise group tours.

Tasks include:

- obtaining information about the availability, cost and convenience of different types of transport and accommodation, ascertaining customer's requirements and advising them on travel arrangements
- preparing itineraries
- making and confirming reservations
- issuing tickets and vouchers
- helping customers in obtaining necessary travel documents such as visas
- preparing bills and receiving payments
- organising group tours for business or vacation travel and selling them to groups or individuals

This unit group includes:

- Booking clerk (travel agency)
- Reservations clerk (travel agency)

**4223 Telephone Operators**

Telephone operators operate telephone communications switchboards and consoles to establish telephone connections, receive caller inquiries and service problem reports, and record and relay messages to staff or clients.

Tasks include:

- operating switchboards and consoles to connect, hold, transfer and disconnect telephone calls
- making connections for outgoing calls
- dealing with telephone inquiries and recording messages
- forwarding messages to staff or clients
- investigating operating system problems and informing repair services

This unit group includes:

- Telephone operator (telephone exchange)
- Telephonist

**4224 Receptionists, Customer Service and Information Clerks**

Receptionists and information clerks receive and welcome visitors, clients or guests; respond to personal, written, electronic mail, and telephone enquiries and complaints about the organisation's goods, services and policies, provide information and refer people to other sources; and also assist customers in various aspects such as making reservations, arranging appointments and presenting statements of charges to departing customers and receiving payment.

Tasks include:

- receiving and welcoming visitors, guests or clients
- answering inquiries about goods, services, and policies and providing information about their availability, location, price and related issues

- dealing with telephone requests for information or appointments; and providing advice, information and assistance
- identifying requirements and entering events into a computer system
- referring complex enquiries to team leaders or expert advisers
- recording information about enquiries and complaints
- issuing relevant forms, information kits and brochures to interested parties

This unit group includes:

- Receptionist (general)
- Hotel receptionist
- Customer service officer/clerk
- Contact centre information clerk

This unit group excludes:

- Reservations clerk (travel agency) (4221)

#### 4229 **Client Information Clerks Not Elsewhere Classified**

This unit group includes client information workers not included elsewhere in Minor Group 422 'Client information clerks'. For instance, it includes workers who obtain and process information from clients needed to determine eligibility for services.

Tasks include:

- interviewing patients to obtain and process information required to provide hospital services
- interviewing applicants for public assistance to gather information pertinent to their application
- verifying the accuracy of information provided
- initiating procedures to grant, modify, deny or terminate assistance
- providing information and answering questions concerning benefits and claims procedures
- referring patient or applicant to other organisations if they are ineligible for services

This unit group includes:

- Hospital admissions clerk

#### 4311 **Accounting and Bookkeeping Clerks**

Accounting and bookkeeping clerks compute, classify, and record numerical data to keep financial records complete. They perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records.

Tasks include:

- checking figures, postings, and documents for correct entry, mathematical accuracy, and proper codes
- operating computers programmed with accounting software to record, store, and analyse information
- classifying, recording, and summarising numerical and financial data to compile and keep financial records, using journals and ledgers or computers

- calculating, preparing, and issuing bills, invoices, account statements, and other financial statements according to established procedures
- compiling statistical, financial, accounting or auditing reports and tables pertaining to such matters as cash receipts, expenditures, accounts payable and receivable, and profits and losses

This unit group includes:

- Accounts clerk
- Cost clerk
- Cost computing clerk

This unit group excludes:

- Bank operations clerk (4312)
- Finance clerk (4312)

#### 4312 **Finance and Insurance Clerks**

Finance and insurance clerks perform clerical tasks relating to the transactions of insurance establishments, banks and other financial establishments.

Tasks include:

- processing insurance enrolments, cancellations, claims transactions, policy changes and payments
- calculating totals, averages, percentages and other details and presenting them in the required tabular form
- preparing financial documents and calculating interest or brokerage charges and stamp duties payable
- maintaining records of bonds, shares and other securities bought or sold on behalf of clients or employer

This unit group includes:

- Bank operations clerk
- Insurance clerk
- Bonds clerk

This unit group excludes:

- Accounts clerk (4311)
- Statistical clerk (4314)

#### 4314 **Statistical Clerks**

Statistical clerks obtain, code, compile and compute statistical or actuarial data. Methods to obtain information include interviewing people and recording their responses to survey and market research questions.

Tasks include:

- contacting individuals by telephone or in person and explaining the purpose of the interview
- asking questions following the outlines of questionnaires and surveys
- recording responses on paper or entering responses directly into a computer database through computer-assisted interviewing systems
- identifying and resolving inconsistencies in responses

- providing feedback to survey sponsors concerning problems in obtaining valid data
- obtaining and compiling statistical or actuarial data based on routine or special sources of information
- calculating totals, averages, percentages and other details and presenting them in the required tabular form

This unit group includes:

- Statistical coder
- Traffic clerk
- Enumerator

This unit group excludes:

- Statistical officer (2123)

#### 4315 **Computer Operations Clerks**

Computer operations clerks prepare production schedules and keep records of computer operations.

Tasks included:

- preparing day-to-day production schedules for computer operations
- preparing job flows, including files required, for submission to the computer

This unit group includes:

- Data processing control clerk
- Scheduler (computer operations)

#### 4321 **Stock Clerks**

Stock clerks maintain records of goods produced and production materials received, weighed, issued, dispatched or put into stock.

Tasks include:

- arranging and controlling receipt and dispatch of goods and keeping relevant records
- maintaining stock records, verifying issue of goods, estimating needs and making requisitions of new stocks
- receiving, storing and issuing tools, spare parts, or various equipment and maintaining relevant records
- weighing goods received, issued, produced, or dispatched and maintaining relevant records
- compiling inventories of furniture and other items received for storage

This unit group includes:

- Stock control clerk
- Stores clerk
- Warehouse clerk

This unit group excludes:

- Traffic clerk(freight) (4323)

**4322 Production Clerks**

Production clerks compute quantities of materials required at specified dates for manufacturing, construction and similar production programmes, and prepare and check production operation schedules.

Tasks include:

- computing quantities, qualities and types of materials required by production programme
- preparing production requirements schedules, ensuring that materials are available when needed and keeping relevant records
- preparing or assisting in the preparation of production operation schedules on the basis of customers' orders and production capacity and performance
- verifying stocks, arranging deliveries and investigating delays
- recording and coordinating the flow of work and materials between departments

This unit group includes:

- Planning clerk (materials supply)
- Co-ordinating clerk (production planning)

**4323 Transport Clerks**

Transport clerks keep records of operational aspects and coordinate the timing of train, road, sea and air passenger and freight transport and prepare reports for management.

Tasks include:

- keeping records of operational aspects and coordinating the timing of passenger and freight transport
- directing train routings within a division or zone of a railway system and keeping related records
- directing, controlling and keeping records of freight handling at a railway yard
- coordinating and keeping records of operational activities concerning road transport, such as allocation and scheduling of vehicles and drivers, loading and unloading of vehicles and storage of goods in transit
- coordinating and keeping records of operational activities concerning air transport of passengers and freight, such as passenger lists and freight manifests
- preparing reports for management

This unit group includes:

- Shipping clerk (freight)
- Land transport clerk
- Air transport clerk
- Traffic clerk(freight)

This unit group excludes:

- Stock clerk (4321)

**4411 Library Clerks**

Library clerks issue and receive library materials, sort and shelve books, sound and vision recordings, periodicals, journals, magazines and newspapers and provide general library information to library users.

Tasks include:

- issuing and receiving library books and other materials
- re-shelving books and other library materials
- performing clerical activities such as manual and electronic filing, word processing and occasional typing
- maintaining journal subscriptions
- assisting library users in accessing basic library materials and making inter-library loans
- maintaining library records relating to the acquisition, issue and return of books and other materials

This unit group includes:

- Library assistant
- Book loan clerk

**4417 Legal Clerks**

Legal clerks perform support functions in courts of law or in law offices, and duties mostly connected with the keeping of office and library records with aspects of legal matters.

Tasks include:

- documenting court proceedings and judgements
- serving statements of claims, summonses, warrants, subpoenas and other court orders
- preparing legal documents including trial briefs, pleadings, appeals, wills and contracts; and preparing papers summarising legal positions, or setting out conditions of loans or insurance
- preparing documents relating to transfer of real estate, stocks or other matters requiring formal registration

This unit group includes:

- Law clerk
- Legal clerk

**4419 Clerical Support Workers Not Elsewhere Classified**

This unit group covers clerical support workers not classified elsewhere in Major Group 4 'Clerical support workers'. For instance, the group includes proof readers, correspondence clerks, press clippers and publication clerks.

Tasks include:

- converting information into codes and classifying information by codes for data-processing purposes
- comparing proofs of texts and related materials prepared for printing with original material, correcting errors and marking texts for printer according to the established rules
- addressing circulars and envelopes by hand
- receiving customers' orders for classified advertising, writing and editing copy, calculating advertising rates and billing customers
- writing business and government correspondence such as replies to requests for information and assistance, damage claims, credit and billing enquiries and service complaints
- assisting in the preparation of periodicals, advertisements, catalogues, directories and other material for publication
- reading newspapers, magazines, press releases and other publications to locate and file articles of interest to staff and clients

This unit group includes:

- Petition writer
- Letter writer
- Printer's proof reader



**5111 Travel Attendants and Stewards**

Travel attendants and stewards ensure the comfort and safety of passengers, serve meals and beverages and render personal services, usually on aircraft and onboard ships. They may plan and coordinate housekeeping and social activities on ships.

Tasks include:

- greeting passengers entering aircraft or ships, checking tickets or boarding passes, and directing them to their seats or berths
- announcing, explaining and demonstrating safety and emergency procedures, such as the use of oxygen masks, seat belts and life jackets
- assembling and serving pre-prepared meals and beverages
- selling duty-free and other goods
- taking care of general needs and comfort of passengers, answering inquiries, and keeping cabins clean and tidy
- directing and assisting passengers and following prescribed procedures in the event of an emergency, such as evacuating a plane following an emergency landing
- verifying that first aid kits and other emergency equipment are in working order
- administering first aid to passengers in distress
- attending pre-flight briefings concerning weather, altitudes, routes, emergency procedures, crew coordination, lengths of flights, food and beverage services offered, and numbers of passengers
- preparing passengers and aircraft for take-off and landing
- determining special assistance needs of passengers such as small children, the elderly or disabled persons

This unit group includes:

- Chief steward (ship)
- Aircraft hostess
- Ship cabin attendant

This unit group excludes:

- Bus conductor (5112)
- Ticket inspector (5112)

**5112 Transport Service Inspectors and Related Workers**

Transport service inspectors check and issue tickets and ensure the safety and comfort of passengers on trains, trams, buses and other public transport vehicles. This unit group also includes workers that perform other service related tasks in the transportation industry such as broadcasting announcements and ensuring service standards.

Tasks include:

- collecting and issuing tickets, passes or fares, and checking the validity of tickets issued previously
- attending to sleeping-cars and their occupants on passenger trains
- providing assistance with boarding, seating and luggage as required, especially to elderly, sick or injured people
- opening and closing doors for passengers
- performing equipment safety checks prior to departure signalling to drivers to stop or proceed
- greeting passengers boarding transportation equipment and announcing routes and stops
- ensuring that safety regulations are respected
- responding to passengers' requests and complaints and providing information about stops and connections
- taking appropriate action in case of emergencies or accidents

This unit group includes:

- Ticket inspector

**5113 Tour and Other Guides**

Tour and other guides accompany individuals or groups on trips, sightseeing tours and excursions and on tours of places of interest such as historical sites, industrial establishments and theme parks. They describe points of interest and provide background information on interesting features.

Tasks include:

- escorting and guiding tourists on cruises and sightseeing tours
- escorting visitors through places of interest such as museums, exhibitions, theme parks, factories and other industrial establishments
- describing and providing information on points of interest and exhibits and responding to questions
- conducting educational activities for school children
- monitoring visitors' activities to ensure compliance with establishment or tour regulations and safety practices
- greeting and registering visitors and tour participants, and issuing any required identification badges or safety devices
- distributing brochures, showing audio-visual presentations, and explaining procedures and operations at tour sites
- providing for physical safety of groups, and performing activities such as providing first aid and directing emergency evacuations
- resolving any problems with tour itineraries, service or accommodation

This unit group includes:

- Tour leader
- Fishing guide
- Art gallery guide

This unit group excludes:

- Amusement ride operator (8189)

#### 5120 **Cooks**

Cooks plan, organise, prepare and cook meals, according to recipes or under the supervision of chefs, in hotels, restaurants and other eating places, on board ships, on passenger trains and in private households.

Tasks include:

- planning meals, preparing and cooking foodstuffs
- planning, supervising and coordinating the work of kitchen helpers
- checking the quality of food
- weighing, measuring and mixing ingredients according to recipes and personal judgement
- regulating the temperature of ovens, grills, roasters and other cooking equipment
- inspecting and cleaning the kitchen, kitchen equipment and serving areas to ensure safe and sanitary food handling practices
- operating large-volume cooking equipment such as grills, deep-fat fryers, or griddles

This unit group includes:

- Mess cook (ship)
- Pastry cook (restaurant)

This unit group excludes:

- Chefs (3434)

#### 5131 **Waiters**

Waiters serve food and beverages in commercial dining and drinking places, clubs, institutions and canteens, on board ships and on passenger trains.

Tasks include:

- setting tables with clean linen, cutlery, crockery and glassware
- greeting customers and presenting them with menus and beverage lists
- advising on food and beverage choices
- taking orders for food and drinks and passing order to kitchen or bar staff
- serving food and beverages to clients at tables
- clearing tables and returning dishes and cutlery to kitchen
- presenting bills, accepting payment and operating point of sales machines and cash registers

This unit group includes:

- Restaurant captain
- Waiter

This unit group excludes:

- Restaurant manager (1412)

#### 5132 **Bartenders and Baristas**

Bartenders and baristas prepare, mix and serve alcoholic and non-alcoholic drinks, including coffee-based drinks, directly to customers over a bar or counter or through waiters.

Tasks include:

- taking beverage orders from serving staff or directly from patrons
- preparing and serving alcoholic and non-alcoholic drinks at a bar
- washing used glassware, cleaning and maintaining bar service areas, tea and coffee-making areas and equipment such as espresso machines
- collecting payment for sales, operating cash registers and balancing cash receipts
- tapping kegs and attaching supply lines
- assisting in keeping bar properly stocked and arranging bottles and glasses
- checking identification of customers to verify age requirements for purchase of alcohol
- mixing ingredients to prepare cocktails and other drinks
- serving snacks or other food items to customers at the bar

This unit group includes:

- Bartender
- Barista
- Mixologist

This unit group excludes:

- Waiter (5131)

#### 5133 **Bar/Lounge Hostesses**

Bar/Lounge hostesses accompany and entertain guests in various nightspots, night clubs, karaoke lounges and discotheques.

Tasks include:

- welcoming clients to a night-club and ensuring that they are entertained well
- accompanying and entertaining guests through various means such as drinking and singing
- serving alcoholic drinks
- providing companionship

This unit group includes:

- Bar hostess

This unit group excludes:

- Social escort (5199)
- Dance hostess (5199)

#### 5139 **Waiters and Bartenders Not Elsewhere Classified**

This unit group includes all occupations under the Minor Group 513 'Waiters and bartenders' that are not classified under the scope of unit groups 5131-5133 such as food tasting, food checking and other various catering related services.

Tasks include:

- setting up and rearranging tables and cutlery
- presentation of food, checking and ensuring quality of food in terms of hygiene and taste

This unit group includes:

- Food checker (catering service)

#### 5141 **Hairdressers, Barbers and Other Related Workers**

Hairdressers cut, style, colour, straighten and permanently wave hair, shave or trim facial hair and treat scalp conditions.

Tasks include:

- cutting, washing, tinting and waving hair
- shaving or trimming beards and moustaches
- giving scalp treatment
- providing advice on hair care, beauty products and hairstyles
- styling hair into dreadlocks and braids and adding hair extensions
- arranging appointments and collecting payments
- cleaning work areas and sanitising instruments

This unit group includes:

- Hairdresser
- Barber
- Hair therapist

#### 5142 **Beauticians and Related Workers**

Beauticians and related workers give facial and body beauty treatments, apply cosmetics and make-up and give other kinds of treatment to individuals in order to improve their appearance.

Tasks include:

- cleaning and applying creams, lotions and related products to face and parts of body
- applying make-up to clients of a beauty parlour or to actors and other performers
- cleaning, shaping and polishing finger and toe-nails and treating minor ailments of the human foot such as corns, calluses or deformed toe-nails

- performing manicures and pedicures including decorative nail art, application of artificial nails, nail repair and other specialised hand and foot treatment
- using waxing, sugaring and depilation techniques to remove unwanted bodily hair
- providing advice and selling cosmetics and other beauty products
- arranging appointments and collecting payments

This unit group includes:

- Beautician
- Cosmetologist
- Manicurist
- Make-up artist (stage and studio)

This unit group excludes:

- Slimming consultant (5149)

#### 5149 **Wellness Related Workers Not Elsewhere Classified**

This unit group includes all occupations under the Minor Group 514 'Hairdressers, beauticians and related workers' that are not classified under the scope of unit groups 5141 and 5142, such as slimming consultants.

Tasks include:

- discussing client needs, analysing characteristics and advising on treatment methods
- giving body massage
- advising clients on diet and exercise to assist in weight loss and slimming
- evaluating slimming processes and products
- receiving bookings, arranging appointments and maintaining client records
- cleaning work areas and sanitising instruments

This unit group includes:

- Slimming consultant

#### 5150 **Housekeepers and Related Workers**

Housekeepers coordinate, schedule, and supervise housekeeping staff in hotels, service apartments, residential and other related premises.

Tasks include:

- training and supervising helpers and other housekeeping staff
- purchasing or controlling the purchase of supplies
- controlling storage and issue of supplies
- supervising general welfare and conduct of individuals in institutions
- assisting in cases of minor injury or illness by performing tasks such as taking temperature, giving medicine, putting on bandages
- performing other housekeeping duties
- sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures
- taking care of household pets and plants, receiving visitors, answering telephones, delivering messages and shopping for groceries

- preparing and cooking meals, setting and clearing tables and serving food and beverages
- making beds, cleaning bathrooms, supplying towels, soap and related items
- cleaning kitchens and generally helping with kitchen work, including dishwashing
- restocking mini-bars and replenishing items such as drinking glasses and writing equipment

This unit group includes:

- Housekeeper (hotels and other establishments)
- House steward
- Butler

This unit group excludes:

- Building caretaker (9626)

#### 5160 **Mail Carriers and Sorting Workers**

Mail carriers and sorting workers perform sorting, recording, delivery and other duties in connection with mail services from post offices or related organisations, as well as from or within an establishment.

Tasks include:

- performing mail-handling duties in public post offices or privately owned delivery establishments
- sorting and delivering mail to private houses and businesses
- providing delivery confirmation records when requested by the client
- sorting and keeping simple records of incoming and outgoing correspondence and dispatching outgoing mail in various establishments

This unit group includes:

- Courier service supervisor
- Postman
- Process server

#### 5170 **Bookmakers, Croupiers and Related Gaming Workers**

Bookmakers, croupiers and related gaming workers determine odds and receive and pay off bets on results of sporting or other events, or conduct games of chance in gambling establishments.

Tasks include:

- determining risks to decide odds and to hedge or refuse bets
- preparing and issuing lists of approximate odds
- distributing cards, rolling dice or spinning a roulette wheel
- explaining and interpreting operating rules of a gambling establishment
- announcing winning numbers, paying winners and collecting payments from losers

This unit group includes:

- Gaming supervisor
- Croupier
- Casino shift manager/supervisor
- Pit manager/supervisor
- Slot manager/supervisor

This unit group excludes:

- Cage/Count supervisor (5230)

#### 5191 **Astrologers, Fortune-tellers and Related Workers**

Astrologers, fortune-tellers and related workers recount past and predict future events in persons' lives by practising astrology, on the basis of characteristics of the clients' palms, samples of playing cards drawn or other techniques.

Tasks include:

- casting horoscopes of individuals at birth or later to recount past and forecast future events and conditions of their lives
- interpreting characteristics of clients' palms, samples of playing cards, position of tea leaves or coffee remnants in a cup, shapes and patterns of bones of dead animals etc
- forecasting future events on the basis of these interpretations
- determining auspicious times for various human activities such as inaugurations, marriages, journeys and religious and other ceremonies
- giving warnings and advice on possible courses of action
- advising individuals on precautions to be taken to avoid evil influences

This unit group includes:

- Astrologer
- Palmist

#### 5193 **Undertakers and Embalmers**

Undertakers and embalmers perform various tasks in the disposal of dead human bodies.

Tasks include:

- making arrangements for, and conducting, funerals, cremations and burials
- embalming human bodies to retard or arrest the process of decay
- conforming to health and sanitation and ensuring that legal requirements concerning embalming are met
- incising and closing incisions on various parts of the body and reshaping or reconstructing disfigured or maimed bodies when necessary
- dressing bodies and placing them in caskets
- conducting interviews to arrange for preparation of obituary notices, to assist with the selection of caskets or urns, and to determine the location and time of burials or cremations



This unit group includes:

- Funeral director
- Embalmer
- Undertaker

#### 5194 **Pet Groomers, Animal Keepers and Trainers**

Pet groomers, animal keepers and trainers feed, handle, train and groom animals and assist veterinarians, animal health technologists and technicians in veterinary facilities, animal shelters, breeding and boarding kennels, zoos, laboratories, retail pet shops, riding schools, dog training schools, pet grooming and similar establishments.

Tasks include:

- bathing and feeding animals
- leading or carrying animals to treatment room and holding them during treatment
- cleaning and sterilising veterinary surgical instruments
- labelling drugs, chemicals and other pharmaceutical preparations and replenishing stock
- sterilising bottles, beakers and other equipment
- cleaning, organising, and disinfecting animal quarters such as pens, stables, cages, and yards, and animal equipment such as saddles and bridles
- collecting and recording animal information such as weight, size, physical condition, treatments received, medications given and food intake
- training animals to develop and maintain desired animal behaviours for competition, entertainment, obedience, security, riding and other activities
- grooming animals by performing tasks such as washing, brushing, clipping, and trimming coats, cutting nails and cleaning ears

This unit group includes:

- Pet groomer
- Animal keeper (zoo)
- Crocodile trainer
- Dog trainer

#### 5195 **Driving Instructors**

Driving instructors teach people how to drive motor vehicles.

Tasks include:

- instructing students under actual driving conditions, and explaining and demonstrating the operation of brakes, clutch, gear selection, automatic transmission, signals and lights
- teaching road traffic regulations
- teaching road craft and road safety
- advising students when they are ready to undergo driving examination
- advising on and teaching advanced driving techniques required for emergency situations
- illustrating and explaining the handling and mechanical operation of motor vehicles and driving techniques using blackboard diagrams and audio-visual aids

This unit group includes:

- Driving Instructor

5199 **Personal Service Workers Not Elsewhere Classified**

This unit group covers personal service workers not classified elsewhere in Sub-Major Group 51 'Personal service workers'. For instance, social escorts are classified here.

Tasks include:

- accompanying clients to restaurants and other outings
- acting as a dancing partner

This unit group includes:

- Social escort
- Dance hostess

5211 **Hawker/Stall Holders (Excluding Prepared Food or Drinks)**

Hawkers/Stall holders (excluding prepared food or drinks) sell various goods from stalls on open-air or covered markets or from stalls in streets or other open spaces.

Tasks include:

- obtaining permission to set up a stand at a particular place in streets, markets or other open spaces
- determining product mix, stock and price levels for goods to be sold
- buying or contracting a regular supply of goods to be sold from wholesale suppliers or directly from producers
- demonstrating and selling goods and accepting payment
- stacking and displaying goods for sale, and wrapping and packing goods sold
- keeping accounts and maintaining a record of stock levels

This unit group includes:

- Hawker (excluding prepared food or drinks)
- Street vendor (excluding prepared food or drinks)

This unit group excludes:

- Hawker (prepared food or drinks) (5212)
- Newsvendor (5213)
- Sales supervisor (5220)
- Shop assistant (5220)

5212 **Hawker/Stall Holders (Prepared Food or Drinks)**

Hawker/stall holders (prepared food or drinks) prepare and sell, or sell previously prepared, hot or cold food and beverages ready for immediate consumption in streets and public places such as hawker centres and markets.

Tasks include:

- obtaining permission or a licence, where required, to sell food and drinks on the street or in a public place
- obtaining food and drinks for sale

- preparing on the spot, food and drinks for sale
- displaying and selling food and drinks and accepting payment

This unit group includes:

- Hawker (prepared food or drinks)
- Street vendor (prepared food or drinks)

This unit group excludes:

- Hawker (other than prepared food or drinks) (5211)
- Newsvendor (5213)
- Sales supervisor (5220)
- Shop assistant (5220)
- Fast food restaurant counter attendant (5249)

**Notes** Vendors from street and market stalls of fresh food products not intended for immediate consumption are classified in Unit Group 5211 'Hawker/Stall holders (excluding prepared food or drinks)'. Vendors in streets and public places that prepare food and beverages for immediate consumption are classified in Unit Group 5212 'Hawker/Stall holders (prepared food or drinks)'. Workers who prepare simple food items for immediate consumption, such as hamburger cooks, but have limited direct contact with clients, are classified partly in Unit Group 9410 'Food preparation and kitchen assistants'.

#### 5213 **Newsvendors**

Newsvendors sell newspapers and magazines in streets and public places such as stations, shopping centres or theatres.

Tasks include:

- displaying newspapers, magazines and related items for sale
- receiving payment

This unit group includes:

- Newsvendor

#### 5219 **Other Stall Sales Workers**

This unit group includes stall sales workers not classified elsewhere in Minor Group 521 'Stall sales workers'. They help to prepare and sell, or sell previously prepared, hot or cold food and beverages ready for immediate consumption in streets and public places such as hawker centres and markets. It includes workers helping out in stalls that sell various goods such as accessories, textile products, wood carvings, embroidery, lace and various other goods.

Tasks include:

- setting up a stall at a particular place in streets, markets or other open spaces with permission granted by authorities
- demonstrating and selling goods and accepting payment
- stacking and displaying goods for sale, and wrapping and packing goods sold
- keeping accounts and maintaining a record of stock levels

This unit group excludes:

- Hawker (prepared food or drinks) (5212)
- Newsvendor (5213)
- Sales supervisor (5220)
- Shop assistant (5220)

#### 5220 **Shop and Store Salespersons**

Shop and store salespersons sell a range of goods and services directly to the public or on behalf of retail and wholesale establishments. They explain functions and qualities of these goods and services. Shop supervisors also supervise the activities of shop sales assistants and cashiers.

Tasks include:

- ensuring that safety procedures are enforced
- determining customers' requirements and advising on product range, price, delivery, warranties and product use and care
- demonstrating and explaining to customers the establishment's goods and services
- selling goods and services, accepting payment by a variety of payment methods, preparing sales invoices and recording sales using cash registers
- assisting with the ongoing management of stock such as product inventories and participating in stock takes
- stacking and displaying goods for sale, and wrapping and packing goods sold

This unit group includes:

- Sales supervisor
- Showroom supervisor (retail trade)
- Shop assistant
- Florist

This unit group excludes:

- Retail sales and shop sales manager (1420)

#### 5230 **Cashiers and Ticket Clerks**

Cashiers and ticket clerks operate cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods, services and admissions in settings such as stores, restaurants and ticket offices.

Tasks include:

- receiving and verifying payment by cash, cheque, credit card or automatic debit in stores, ticket offices or similar establishments
- giving change and issuing receipts
- issuing tickets for attendance at sporting and cultural events
- counting and recording money received or paid out and balancing against cash register sales records
- receiving incoming cash, checking it against sales slips and other documents, and preparing it for deposit at bank
- operating cash register to calculate total to be paid from or to clients
- scanning, weighing and recording prices of goods
- wrapping and placing merchandise in bags

This unit group includes:

- Cashier (general)
- Restaurant cashier

This unit group excludes:

- Shop assistant (5220)

#### 5241 **Fashion and Other Models**

Fashion and other models wear and display clothing and accessories and pose for photographs, film and video, advertising, still photography or for artistic creation.

Tasks include:

- dressing in sample apparel of new or current styles or of type wanted by customer
- walking, turning and posing to demonstrate style and characteristics of garments, fashion accessories and other merchandises to best advantage
- posing as subject for sculpture, painting and other types of visual art
- posing for still photography for magazines and other advertising media
- posing for television, video and cinema commercials and other productions

This unit group includes:

- Fashion model
- Artist's model

#### 5242 **Sales Demonstrators and Door-to-Door Salespersons**

Sales demonstrators and door-to-door salespersons sell goods and services and solicit business for an establishment by approaching or visiting potential customers, either in commercial premises and exhibitions or by going from door to door. They also demonstrate goods at commercial premises, exhibitions and private homes.

Tasks include:

- setting up displays and demonstrating articles for sale to inform customers about their characteristics and mode of use, as well as to stimulate buying interest
- answering questions and offering advice on the use of goods
- selling goods or directing customers to sales staff
- taking orders and making arrangements for payment, delivery and collection of goods
- offering sample goods and distributing catalogues and advertising material
- giving details of various goods or services and of terms of sale by visiting clients and potential clients door to door
- preparing invoices and sales contracts and accepting payment
- compiling lists of prospective clients and calling on them to obtain new businesses
- travelling between sales areas and clients and transporting samples or goods for sale

This unit group includes:

- Demonstrator
- Sales promoter
- Outdoor salesman

This unit group excludes:

- Street vendor (other than prepared food or drinks) (5211)
- Hawker (prepared food or drinks) (5212)

#### 5244 **Contact Centre Salespersons**

Contact centre salespersons contact existing and prospective customers, using the telephone or other electronic communications media to promote goods and services, obtain sales and arrange sales visits. They may work from a customer contact centre or from non-centralised premises.

Tasks include:

- promoting goods and services by telephone or electronic mail, following scripts and working from lists of contacts
- creating interest in goods and services, and seeking a sale or agreement to see sales representatives
- arranging processing and despatch of goods and services, information kits and brochures to customers
- arranging appointments for sales representatives
- recording notes for follow-up action and updating marketing databases to reflect changes to the status of each customer
- reporting issues raised by contacts for attention by managers
- maintaining statistics of calls made and successes achieved
- submitting periodic reports on telemarketing activities and results

This unit group includes:

- Telemarketer

#### 5249 **Sales Workers Not Elsewhere Classified**

This unit group includes sales workers not classified elsewhere in Sub-Major Group 52 'Sales workers'. It includes service station attendants that provide re-fuelling services and sales of other automotive products, and food service counter attendants that serve customers at food counters.

Tasks include:

- filling fuel tanks and containers to level specified by customer
- checking and replenishing air pressure in vehicle tyres and oil and other vehicle fluid levels
- washing vehicle windscreens and windows
- performing minor repair work to vehicles such as replacing tyres, light bulbs and windscreen wiper blades
- maintaining and operating automatic car wash facilities
- cleaning petrol pumps and surrounding driveway, shop and facilities
- serving food to customers at counters

- ascertaining the products desired by the customer, assisting customer in making a choice and taking orders
- cleaning, peeling, slicing and trimming foodstuffs using manual and electric appliances
- preparing simple food items and re-heating prepared meals
- portioning and wrapping food or placing it directly on plates for service to patrons
- packaging take-away food
- collecting payments from customers for purchases
- undertaking stock control and preparing records on items sold or used

This unit group includes:

- Petrol service station attendant
- Fast food restaurant counter attendant

This unit group excludes:

- Hawker (prepared food or drinks) (5212)
- Fast food preparer (9410)

### 5311 **Child Care and Related Workers**

Child care workers provide care and supervision for children and youths in residential homes and in before-school, after-school, vacation and day care centres.

Tasks include:

- assisting children to wash, dress and feed themselves
- taking children to and from school or outdoors for recreation
- playing games with children, or entertaining them by reading or storytelling
- assisting in the preparation of materials and equipment for children's education and recreational activities
- managing children's and youth's behaviours and guiding their social development
- disciplining children and recommending or initiating other measures to control behaviour, such as caring for own clothing and picking up toys and books
- observing and monitoring children's play activities
- keeping records on individual children or youth, including daily observations and information about activities, meals served, and medications administered

This unit group includes:

- Babysitter
- Confinement nanny
- Child care worker
- After-school care centre worker

This unit group excludes:

- Pre-primary education teacher (3610)

**5312 Teachers' Aides**

Teachers' aides perform non-teaching duties to assist teaching staff, and provide care and supervision for children in schools and pre-schools.

Tasks include:

- demonstrating, supervising and participating in activities that enhance the physical, social, emotional and intellectual development of children in schools and preschools
- preparing indoor and outdoor areas for learning and recreational activities
- assisting children with intellectual, physical, behavioural and other learning difficulties with their studies
- assisting children individually to learn social skills
- assisting with preparing teaching materials, and copying and collating written and printed material
- operating audio-visual equipment, computers and other teaching aides
- distributing and collecting lesson material

This unit group includes:

- Teachers' aide

**5320 Healthcare Assistants and Other Personal Care Workers**

Healthcare assistants and other personal care workers provide direct personal care and assistance with activities of daily living to patients and elderly, convalescent and disabled people in healthcare and residential settings such as hospitals, clinics, residential nursing care facilities, private homes and old folks' homes.

Tasks include:

- providing care, support and treatment to patients and residents of medical, rehabilitative and residential care facilities as per treatment plans established by medical, nursing and other health professionals
- assisting patients with personal and therapeutic care needs such as personal hygiene, feeding, dressing, physical mobility and exercise, communication, taking oral medications and changing dressings
- positioning, lifting and turning patients and transporting them in wheelchairs or on movable beds
- maintaining patients' environmental hygiene standards, such as cleaning patient rooms and changing bed-linen
- providing massage and other non-pharmacological pain relief measures, such as during pregnancy and labour
- observing patients' condition, responses and behaviour and reporting changes to a health professional
- providing clients and families with emotional support and information and advice on topics such as nutrition, hygiene, exercise, caring for infants, or adapting to disability or illness
- providing psychological support to clients such as through conversation or reading aloud
- planning, purchasing, preparing or serving meals to meet nutritional requirements and prescribed diets
- providing support to parents and care for newborns during the postpartum period



- scheduling and accompanying clients for appointments with medical doctors and other health professionals or performing other errands
- assisting therapists by guiding patients through their exercises during the rehabilitation sessions, and holding individual or group therapy sessions with the patients after receiving the treatment plan from the therapists

This unit group includes:

- Healthcare assistant
- Nursing aide (clinic, hospital)
- Home health aide
- Nursing aide (home)
- Therapy aide

This unit group excludes:

- Enrolled/assistant nurse (3220)
- Social worker (2635)

**Notes** This unit group includes workers who provide personal care to residents of institutions and facilities that have permanent medical or nursing supervision (such as hospitals, rehabilitation centres, residential nursing care facilities and nursing homes) as well as those who provide personal care to residents of independent living units, generally without permanent medical or nursing supervision.

#### 5411 **Fire-Fighting and Rescue Officers**

Fire-fighters and rescue officers prevent, fight and extinguish fires and assist in other emergencies, protect life and property and conduct rescue efforts.

Tasks include:

- responding to fire alarms and other calls for assistance, such as automobile and industrial accidents, bomb threats and other emergencies
- controlling and extinguishing fires using manual and power equipment and fire-fighting chemicals
- fighting special types of fires and using special equipment in industrial establishments
- rescuing people from burning buildings and accident sites and those trapped in dangerous situations
- preventing or limiting the spread of dangerous substances in case of fires or accidents
- informing the public about fire prevention

This unit group includes:

- Fire-fighter (general)
- Aircraft accident fire fighter
- Fire salvage specialist
- Fire investigator

**5412 Police Officers**

Police officers maintain law and order, patrol public areas, enforce laws and regulations and arrest suspected offenders.

Tasks include:

- patrolling a specific area to maintain public order, respond to emergencies, protect people and property and enforce laws and regulations
- identifying, pursuing and arresting suspects and perpetrators of criminal acts
- directing traffic and assuming authority in the event of accidents
- providing emergency assistance to victims of accidents, crimes and natural disasters

This unit group includes:

- Police constable
- Marine policeman
- Narcotics officer

This unit group excludes:

- Prison warden (5413)
- Police inspector (3355)

**5413 Prison Officers**

Prison officers watch over and maintain order among inmates of prisons, reformatories or penitentiaries.

Tasks include:

- searching arriving prisoners, putting their valuables in safekeeping, escorting prisoners to cells and locking them in
- making periodic inspection tours of cells and inspecting and maintaining the security of locks, windows, doors and gates
- supervising prisoners at work, meals or during recreation periods
- observing the conduct and behaviour of prisoners to prevent disturbances and escapes
- patrolling prison areas to prevent escape
- assisting with the implementation of rehabilitation programmes
- escorting prisoners in transit and during temporary leaves

This unit group includes:

- Gaoler
- Prison warden

**5414 Security Guards**

Security guards patrol or monitor premises to guard property against theft and vandalism. They control access to establishments and maintain order and enforce regulations at public events and within establishments.

Tasks include:

- patrolling premises and checking doors, windows and gates to prevent and detect signs of unauthorised entry

- controlling access to establishments, monitoring and authorising the entrance or departure of employees and visitors, checking identification and issuing security passes
- circulating among visitors, patrons or employees to preserve order, protect property from theft or vandalism and enforce the regulations of the establishment
- responding to alarms, investigating disturbances and contacting superiors, police or fire-fighters as appropriate
- performing security checks of passengers and luggage at airports
- picking up and ensuring the safe delivery of cash and valuables to banks, automated teller machines and retail establishments
- coaching and leading a team of security guards, reviewing and updating security operating procedures, etc

This unit group includes:

- Security guard (private)
- Patrolman (private establishment)
- Security supervisor

This unit group excludes:

- Watchman (9626)

#### 5415 **Lifeguards**

Lifeguards look after the safety of people at beaches or swimming pools through accident prevention and rescue and educating the public on water safety. This occupation requires high levels of physical fitness, sporting ability and personal commitment as well as, or in place of, formal qualifications or experience.

Tasks include:

- patrolling beaches and swimming pools to prevent accidents and to rescue bathers from drowning

This unit group includes:

- Beach guard
- Lifeguard

**5419 Protective Services and Related Workers Not Elsewhere Classified**

This unit group covers protective services workers not classified elsewhere in Minor Group 541 'Protective services workers'. For instance, the group includes private investigators, industrial investigators, gaming investigators, bouncers and park rangers.

Tasks include:

- conducting private investigations for commercial or other establishments and individuals
- control access to discotheques and related recreational establishments
- maintaining order at venues where there are such gatherings of people
- responding to citizen complaints concerning stray domestic animals, livestock and wildlife, issuing warnings and citations to owners and impounding lost, homeless and dangerous animals
- patrolling natural reserves and parks to prevent theft, vandalism and fires

This unit group includes:

- Private investigator
- Industrial investigator
- Park ranger

**5900 Service Workers Not Elsewhere Classified**

This unit group covers workers performing tasks outside the scope of those classified in unit groups 5111-5419.

**6111 Vegetable Farm Workers**

Vegetable farm workers perform farming operations to grow and harvest various types of field crops such as rice and other cereals, beetroot, sugar-cane, ground-nuts, tobacco, reed or other field crops and potatoes, cabbages or other field vegetables, for sale or delivery on a regular basis to wholesale buyers, marketing organisations or at markets. The unit group does not include working proprietors and managers in agriculture.

Tasks include:

- preparing soil by hand or machine, and spreading fertilisers and manure
- selecting and sowing seeds and planting seedlings
- maintaining crops by cultivating soil, by transplanting, pruning or thinning plants and by setting up and operating irrigation equipment
- controlling weeds, pests and diseases by applying herbicides and pesticides
- harvesting crops and destroying diseased or superfluous crops
- inspecting, cleaning, grading, packaging, storing and loading crops for sale or delivery to market
- maintaining farm buildings, structures, equipment and water supply systems
- storing and carrying out some processing of produce
- promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies and maintaining and evaluating records of farm activities and transactions

This unit group includes:

- Hydroponics farm worker
- Mushroom farm worker
- Vegetable farmer

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

**6113 Gardeners, Horticultural and Nursery Farm Workers**

Gardeners, horticultural and nursery farm workers perform operations to cultivate and maintain trees, shrubs, flowers and other plants in parks and private gardens, and to produce saplings, bulbs and seeds, or grow vegetables and flowers by intensive cultivation techniques, for sale or delivery on a regular basis to wholesale buyers, marketing organisations or at markets.

Tasks include:

- preparing land by conditioning soil, levelling ground and installing and operating irrigation and drainage systems planting trees, hedges, garden plants and grass
- pruning and trimming trees, shrubs and hedges, installing plant supports and protection, and rolling, mowing aerating and edging lawns
- constructing features and facilities within gardens, such as paths or paved areas, walls, rockeries, garden beds, ponds and water features, sheds and fences

- checking the health of plants and trees, identifying and treating weeds, pests and diseases, and applying mulch and fertilisers
- producing saplings, bulbs and seeds and raising plants from seeds or cuttings
- harvesting crops inspecting, cleaning, grading, packaging, storing and loading products for sale or delivery to market
- maintaining buildings, greenhouses and other structures, equipment and water supply systems
- storing and carrying out some processing of produce
- promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies and maintaining and evaluating records of activities and transactions

This unit group includes:

- Flower and orchid farm worker
- Nursery worker
- Gardener and horticultural worker
- Landscape technician
- Nursery supervisor

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

#### 6121 **Livestock and Dairy Farm Workers**

Livestock and dairy farm workers perform farming operations to breed and raise domesticated animals (excluding poultry), such as cattle, sheep, pigs, goats, horses and camels, for the production of meat, milk and other dairy products, skins, and wool or for use as working, sporting or recreational animals for sale or delivery to wholesale buyers, marketing organisations or at markets.

Tasks include:

- cultivating pastures and providing and monitoring fodder and water supplies to maintain appropriate nutritional levels and condition of livestock
- monitoring and examining animals to detect illness, injury, or disease, and to check physical condition such as rate of weight gain
- grooming, marking, clipping, trimming, drenching and/or castrating animals and shearing coats to collect hair or wool
- herding livestock to pastures for grazing or to scales, sheds, vehicles, or other enclosures
- milking animals by hand or using milking machines
- mixing feed, additives, and medicines in prescribed portions and distributing or hand-feeding to animals for consumption
- performing duties related to livestock reproduction, such as breeding, artificial insemination and helping with animal births
- maintaining and cleaning farm buildings, machinery, equipment, and structures slaughtering and skinning animals and preparing them for market
- storing and carrying out some processing of animal and dairy produce
- promoting and marketing products, arranging the sale, purchase and transportation of livestock, produce and supplies and maintaining and evaluating records of farm activities and transactions

This unit group includes:

- Dairy farm worker
- Livestock farm worker

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

#### 6122 **Poultry Farm Workers**

Poultry farm workers perform farming operations to breed and raise chickens, turkeys, geese, ducks and other poultry to produce meat, eggs and breeding stock for sale or delivery to wholesale buyers, marketing organisations or at markets.

Tasks include:

- growing and purchasing feed and other supplies needed to maintain appropriate nutritional levels and condition of poultry
- monitoring and examining poultry to detect illness, injury or disease, and to check physical condition, such as rate of weight gain, and removing weak, ill and dead poultry from flock
- mixing feed and feed additives and filling feed and water containers
- vaccinating poultry via drinking water, injection or dusting of air
- collecting and storing eggs and packaging them for sale delivery to market
- determining sex of chicks and facilitating breeding, artificial insemination and hatching of eggs
- renting or investing in and maintaining and cleaning farm buildings, machinery, equipment, and structures
- slaughtering and dressing poultry for sale or delivery to market
- storing and carrying out some processing of produce
- arranging the sale, purchase and transportation stock, produce and supplies

This unit group includes:

- Poultry farm worker
- Poultry hatchery worker
- Poultry inseminator

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

#### 6190 **Agricultural Workers Not Elsewhere Classified**

This unit group covers agricultural workers not classified elsewhere in Sub-Major Group 61 'Agricultural workers'. For instance, the group includes tree and shrub crop growers as well as mixed crop workers that plan, organise and perform farming operations to grow and harvest specific combinations of field crops, field vegetables, tree and shrub crops, and garden, horticultural and nursery products; for sale or delivery on a regular basis to wholesale buyers, marketing organisations or at markets. In addition, the unit group also includes forestry workers who carry out the necessary operations to cultivate and conserve forests.

Tasks include:

- preparing soil by hand or machine, and spreading fertilisers and manure
- selecting and sowing seeds, and planting seedlings
- maintaining crops by cultivating soil, by transplanting, pruning or thinning trees and shrubs, and by setting up and operating irrigation equipment
- controlling weeds, pests and diseases, by applying herbicides and pesticides
- tending trees or bushes, collecting sap and harvesting crops; producing saplings, bulbs and seeds
- growing flowers and vegetables by intensive cultivation
- harvesting crops inspecting, cleaning, grading, packaging, storing and loading products for sale or delivery to market
- maintaining farm buildings, structures, equipment and water supply systems
- storing and carrying out some processing of produce
- promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies and maintaining and evaluating records of farm activities and transactions

This unit group includes:

- Rubber farmer
- Mixed farm worker

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

## 6221 **Aquaculture Workers**

Aquaculture workers breed and raise fish and cultivate mussels, oysters and other forms of aquatic life including crocodiles, for sale or delivery on a regular basis to wholesale buyers, marketing organisations or at markets.

Tasks include:

- breeding, raising and cultivating fish, mussels, oysters and other forms of aquatic life as cash crops or for release into freshwater or saltwater
- collecting and recording growth, production and environmental data
- conducting and supervising stock examinations in order to identify diseases or parasites
- monitoring environments to ensure maintenance of optimum conditions for aquatic life
- directing and monitoring trapping and spawning of fish, egg incubation, and fry rearing, applying knowledge of management and fish culturing techniques
- cleaning, freezing, icing or salting catch on or offshore and preparing fish and other products for shipment
- maintaining buildings, tanks, machinery, boats and other equipment
- delivering or marketing products
- renting or investing in buildings, equipment and machinery and purchasing food and other supplies
- supervising and training aquaculture and fish hatchery support workers



This unit group includes:

- Fish farmer
- Aquarium fish farmer
- Crocodile farmer
- Oyster farm worker

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

## 6222 Coastal Waters and Deep Sea Fishery Workers

Coastal waters and deep sea fishery workers, alone, or either as skippers or members of fishing crews, catch fish or gather other forms of aquatic life in deep sea, inland or coastal waters for sale or delivery to wholesale buyers, marketing organisations or at markets.

Tasks include:

- preparing and repairing nets and other fishing gear and equipment
- selecting area for fishing, plotting courses and computing navigational positions using compass, charts and other aids
- commanding and operating fishing vessels to, from and at fishing grounds
- steering vessels and operating navigational instruments and electronic fishing aids
- baiting, setting, operating and hauling in fishing gear by hand or using hoisting equipment
- gathering various forms of aquatic life from shores and shallow waters
- maintaining engine fishing gear and other on-board equipment
- keeping records of transactions, fishing activities, weather and sea conditions on ship's log and estimating costs and budgets
- cleaning, freezing, icing or salting catch on or offshore, followed by sorting, and storing catch in holds with salt and ice
- removing catches from fishing equipment, measuring them to ensure compliance with legal size and returning undesirable or illegal catches to the water
- direct fishing operations and supervising fishing crew members
- selecting and training vessel crews

This unit group includes:

- Coastal waters fisherman
- Whaler crewman
- Kelong fisherman

This unit group excludes:

- Production manager in agriculture and fisheries (1310)

**7100 Supervisors and General Foremen (Building and Related Trades)**

Supervisors and general foremen in building and related trades supervise activities of a distinct unit at a construction site, control and coordinate the activities of workers who are engaged in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- Chargehand (construction)
- Civil engineering construction general foreman
- Supervisor and general foreman (architectural)

**7112 Bricklayers and Related Workers**

Bricklayers and related workers lay bricks, pre-cut stones and other types of building stones in mortar to construct and repair walls, partitions, arches and other structures.

Tasks include:

- laying stone, brick and similar building blocks to construct or repair walls, partitions, fireplaces and other structures such as smokestacks, furnaces, converters, kilns and ovens, piers and abutments
- laying footpaths, kerbs and pavements
- laying bricks or other masonry to build patios, garden walls and other decorative installations

This unit group includes:

- Kerbs installer
- Kiln bricklayer
- Paviour installer

This unit group excludes:

- Stonemason (7113)

**7113 Stone Cutters, Splitters, Carvers and Stonemasons**

Stone cutters, splitters, carvers and stonemasons cut and shape hard and soft stone blocks and slabs for the construction and maintenance of stone structures and monumental masonry and carve designs and figures in stones.

Tasks include:

- driving wedges into quarried stone to break it into slabs or blocks
- selecting and grading slabs of blocks of granite, marble and other stone
- cutting, shaping and finishing building and monumental stone such as granite or marble by using hand or hand-powered tools
- making patterns and marking shapes on stone for subsequent sawing, planing, drilling and other dressing and cutting operations
- cutting and carving characters, figures or designs on stone blocks used for monuments or memorials
- setting stone in the erection of monuments or memorials
- repairing and replacing stonework on old buildings, churches and monuments

This unit group includes:

- Marble polisher
- Monument carver-setter
- Stone grinder

This unit group excludes:

- Mosaic cutter and setter (7122)

**7114 Concrete Placers, Concrete Finishers and Related Workers**

Concrete placers, concrete finishers and related workers erect reinforced concrete frameworks and structures, make forms for moulding concrete, reinforce concrete surfaces, cement openings in walls or casing for wells, finish and repair cement surfaces and carry out terrazzo work.

Tasks include:

- constructing and repairing reinforced concrete floors, walls, tanks, silos and other concrete structures
- making shuttering or assembling pre-fabricated forms for moulding concrete
- cementing openings in walls or casings for wells
- finishing and smoothing surfaces of concrete structures
- applying a durable, smooth surfacing composed of cement, sand pigment and marble particles to floors, known as a terrazzo finish

This unit group includes:

- Concrete shutterer
- Precast concrete erectors
- Screeder

This unit group excludes:

- Concrete finishing machine operator (8342)
- Road surface laying machinery operator (8342)

**7115 Carpenters and Joiners**

Carpenters and joiners cut, shape, assemble, erect, maintain and repair various types of structures and fittings made from wood and other materials.

Tasks include:

- making, altering and repairing structural and other woodwork at a work-bench and on a construction site
- constructing, erecting and installing heavy-framed wooden structures on building sites
- fitting, assembling and altering internal and external fixtures of buildings, such as walls, doors, door and window frames, facings and panelling
- making, repairing and fitting scenic equipment for theatrical performances, motion picture or television productions
- constructing, assembling, altering and repairing wooden fixtures and fittings in train coaches, aircraft, ships, boats, floats and other vehicles

This unit group includes:

- Aircraft joiner
- Ship joiner
- Wood shipwright

This unit group excludes:

- Cabinet maker (7522)
- Vehicle frame builder (7231)

**7119 Building Frame and Related Trades Workers Not Elsewhere Classified**

This unit group covers building frame and related trades workers not elsewhere classified in Minor Group 711 'Building frame and related trades workers'. For example, the group includes steeplejacks, scaffolders and demolition workers.

Tasks include:

- climbing and performing miscellaneous construction and building maintenance work on structures such as towers, chimneys and spires
- erecting temporary metal or wooden scaffolding on building sites
- demolishing buildings and other structures

This unit group includes:

- Building wrecker
- Curtain wall erector
- Scaffolding rigger

This unit group excludes:

- Sandblaster (building exteriors) (7133)

**7121 Roofers**

Roofers build and repair roofs on all types of buildings using one or more kinds of materials.

Tasks include:

- studying drawings, specifications and construction sites to determine materials required
- covering roof frameworks with slate and pre-fabricated tiles to cover pitched roofs
- laying a waterproof shield and fixing metallic or synthetic materials to a building's frame
- sizing and cutting roofing materials to fit around edges corners and protuberances such as chimney
- using natural materials such as thatching to provide roof coverings
- creating temporary structures such as scaffolding and ladders

This unit group includes:

- Metal roofer
- Slate and tile roofer
- Thatcher

**7122 Floor Layers and Tile Setters**

Floor layers and tile setters install, maintain and repair flooring, and cover floors, walls and other surfaces with tiles or mosaic panels for decorative or other purposes.

Tasks include:

- preparing floor areas for covering with a variety of materials
- assembling carpet, tiles or other materials and laying them on floors according to design and other specifications
- preparing wall areas for covering with tiles or other materials for decorative or other purposes such as acoustic insulation
- setting tiles and construction and laying mosaic panels to walls, floors and other surfaces

This unit group includes:

- Floor layer (composition tiles)
- Mosaic cutter and setter
- Timber flooring worker

**7123 Plasterers**

Plasterers install, maintain and repair plasterboard in buildings, and apply decorative and protective coverings of plaster, cement and similar material to the interiors and exteriors of structures.

Tasks include:

- applying one or more coats of plaster to interior walls and ceilings of buildings to produce finished surface
- measuring, marking and installing ornamental plastic panels, and casting and trimming ornamental plastic cornices
- applying protective and decorative covering of cement, plastic and similar materials to exterior building surfaces
- making and installing decorative plastic fixtures of fibrous plaster

This unit group includes:

- Dry wall installer (plasterer)
- Ornamental plasterer
- Partition installer (plaster)

**7124 Insulation Workers**

Insulation workers apply and repair insulating materials to buildings, boilers, pipes or refrigeration and air-conditioning equipment.

Tasks include:

- cutting insulation material by shape and size
- applying slabs and sheets of insulating or sound-absorbing materials to walls, floors and ceilings of buildings
- blow and pack insulating or sound-absorbing materials into cavities between walls, floors and ceilings of buildings with power-driven machines
- examining plans, specifications and work sites to determine the type, quality and quantity of insulation material required
- applying insulation materials to exposed surfaces of equipment such as boilers, pipes and tanks
- insulating refrigeration and air-conditioning equipment

This unit group includes:

- Boiler and pipe insulator
- Refrigeration and air-conditioning equipment insulator
- Suspended ceiling installer

**7125 Glaziers**

Glaziers measure, cut, finish, fit and install flat glass and mirrors.

Tasks include:

- selecting the type of glass to be used, cutting to right size and shape and installing in windows, doors, showers and partitions of buildings
- installing glass and mirrors in skylights, display cases, interior walls and ceilings
- installing or replacing windscreens in vehicles or boats
- creating decorative glass features such as glass walls, staircases, balustrades and stained-glass windows

This unit group includes:

- Plate glass fitter
- Structural glazier
- Vehicle glazier

This unit group excludes:

- Glass cutter (7315)

**7126 Plumbers, Pipe Fitters and Related Workers**

Plumbers, pipe fitters and related workers assemble, install, repair and maintain pipe systems, fittings and fixtures for water, gas, drainage, sewage systems, and hydraulic and pneumatic equipment.

Tasks include:

- measuring, cutting, threading, bending, jointing, assembling, installing, maintaining and repairing pipes, fittings and fixtures of drainage, heating water supply and sewage systems
- installing gas appliances, dishwashers and water heaters, sinks and toilets using hand and power tools
- laying clay, concrete or cast-iron pipes in ditches to form sewers, drains or water mains, or for other purposes
- inspecting, examining and testing installed systems and pipes, using pressure gauge, hydrostatic testing, observation or other methods

This unit group includes:

- Mains layer and jointer
- Pool and filtration system worker
- Ship plumber

This unit group excludes:

- Air-conditioning and refrigerating equipment mechanic (7127)
- Engine-room mechanic (ship) (7233)

**7127 Air-Conditioning and Refrigeration Mechanics**

Air-conditioning and refrigeration mechanics assemble, install, maintain and repair air-conditioning and refrigeration systems and equipment.

Tasks include:

- interpreting blueprints, drawings or other specifications
- assembling, installing and repairing components for air-conditioning and refrigeration systems
- connecting piping equipment by bolting, riveting, welding or brazing
- testing systems, diagnosing faults and performing routine maintenance or servicing

This unit group includes:

- Air-conditioning and refrigerating equipment mechanic
- Refrigeration and air-conditioning equipment installer
- Refrigeration equipment erector

This unit group excludes:

- Gas pipe fitter (7126)

**7129 Building Finishers and Related Trades Workers Not Elsewhere Classified**

This unit group consists of building finishers and related trades workers not elsewhere classified in Minor Group 712 'Building finishers and related trades workers'.

Tasks include:

- performing miscellaneous installing, maintenance and repairing work on structures such as office buildings, apartment houses, factories and similar establishments in good repair
- performing construction, maintenance or repair work at unusual heights
- performing related tasks

This unit group includes:

- Bracer (construction)
- Shorer (construction)



**7131 Building Painters and Related Workers**

Building painters and related workers prepare surfaces of buildings and other structures for painting, apply protective and decorative coats of paint or similar materials, or cover interior walls and ceilings of buildings with wallpaper or other finishes.

Tasks include:

- cleaning and preparing walls and other surfaces of buildings for painting or wallpapering
- selecting and preparing paints to required colours by mixing pigments and additives
- applying or spraying paint, varnish and similar materials to surfaces, fixtures and fittings of buildings
- measuring and hanging wallpaper or other fabrics on interior walls and ceilings
- applying paints, varnishes and stains to surfaces using brushes, rollers and sprays

This unit group includes:

- House painter
- Construction painter
- Wallpaper hanger

This unit group excludes:

- Painter (artist) (2651)
- Structural steel and ship painter (7132)
- Glass decorator-painter (7316)

**7132 Spray Painters, Varnishers and Other Painters**

Spray painters, varnishers and other painters operate spray painting and varnishing equipment to apply protective coatings to manufactured items or structures.

Tasks include:

- preparing surfaces to be coated using a variety of methods to remove grease, dirt and rust
- painting cars, buses, trucks and other vehicles, and applying varnish and other protective coatings
- applying paint as well as protective coatings of enamel or varnish on metal, wooden and other manufactured products, usually with a hand-spraying device

This unit group includes:

- Retoucher-painter (manufacturing)
- Ship hull and structural steel painter
- Motor vehicle spray painter

This unit group excludes:

- Building painter (7131)
- Ceramic spray painter (7316)
- Metal sprayer (8124)

**7133 Building Maintenance Workers, Building Structure Cleaners and Related Workers**

Building maintenance workers, building structure cleaners and related workers clean exterior surfaces of buildings and other structures, and remove soot from chimneys. They also perform maintenance work on buildings and other related works.

Tasks include:

- performing miscellaneous construction and building maintenance work on structures such as office buildings, apartment houses, factories and similar establishments in good repair
- leaning exterior surfaces of stone, brick, metal or similar materials by means of chemicals, or a jet of steam or sand applied under high pressure
- removing soot from flues, chimneys and connecting pipes
- removing asbestos, mould and fire-damaged surfaces from buildings

This unit group includes:

- Building maintenance handyman
- Building exterior cleaner
- Sandblaster (building exteriors)

This unit group excludes:

- Window cleaner (9123)

**7200 Supervisors and General Foremen (Metal, Machinery and Related Trades)**

Supervisors and general foremen in metal, machinery and related trades supervise production activities within a distinct unit of an establishment concerned with fabrication of metal products, preparation and erection of metal structures, or fitting and installing mechanical, and control and coordinate the activities of workers in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- Supervisor and general foreman (metal and machinery trades)
- Supervisor and general foreman (non-electrical/non-electronic machinery manufacturing and repair)

**7211 Metal Moulders and Coremakers**

Metal moulders and coremakers make moulds and cores for casting metal.

Tasks include:

- making moulds by hand or using auxiliary machines on a bench for small metal castings, on the foundry floor, or in a pit for large castings
- making cores for use in metal moulds
- cleaning and smoothing moulds, core boxes, and repairing surface imperfections
- moving and positioning work pieces such as mould sections, patterns, and bottom boards, using cranes, or signalling others to move work pieces
- positioning work patterns inside mould sections and clamping sections together
- cutting sprouts, running holes and sprue holes into moulds
- lifting upper mould sections from lower sections and remove moulded patterns

This unit group includes:

- Jarring machine moulder
- Stripping-plate machine moulder
- Tube coremaker

**7212 Welders and Flame Cutters**

Welders and flame cutters weld and cut metal parts using gas flame, electric arc and other sources of heat to melt and cut, or to melt and fuse metal.

Tasks include:

- welding metal parts using gas flame, or an electric arc, thermite compound or other methods
- operating resistance-welding machines
- using blowtorch to make and repair lead linings, pipes, floors and other lead fixtures
- brazing metal parts together
- cutting metal pieces using gas flame or an electric arc
- joining metal parts by hand soldering
- monitoring the fitting, burning, and welding processes to avoid overheating of parts or warping, shrinking, distortion, or expansion of material
- examining work pieces for defects and measuring work pieces with straight edges or templates to ensure conformance with specifications

This unit group includes:

- Solderer
- Flame cutter (metal cutting machine)
- Gas cutting machine operator (metal)

**7213 Sheet Metal Workers**

Sheet metal workers make, install and repair articles and parts of articles made out of sheet metal such as sheet steel, copper, tin, brass, aluminium, zinc or galvanised iron.

Tasks include:

- marking sheet metal for cutting and shaping
- making and repairing household utensils and other articles in tin, copper and light alloys, or ornamental articles and fittings
- making and repairing boilers, tanks, vats and similar containers
- installing and repairing sheet-metal parts of vehicles and aircraft
- converting blueprints into shop drawings to be followed in the construction and assembly of sheet metal products
- determining project requirements, including scope, assembly sequences, and required methods and materials, according to blueprints, drawings, and written or verbal instructions
- inspecting product quality and installation to ensure conformance to specifications

This unit group includes:

- Boilermaking plater
- Panel beater (vehicle)
- Ornamental sheet metal worker

**7214 Structural Metal Preparers and Erectors**

Structural metal preparers and erectors assemble, erect and dismantle structural metal frames of buildings and other structures.

Tasks include:

- marking metal framework as a guide when drilling, cutting, and shaping them for use in buildings, ships and other structures
- drilling, cutting and shaping structural steel in a workshop
- erecting steel framework for buildings, bridges and other constructions
- assembling and erecting the framework and other metal parts of ships' structures
- shaping and fitting structural-steel plates of ships under construction or repair
- riveting structural-metal members by hand, machine or pneumatic riveter

This unit group includes:

- Ship beam and frame erector
- Ship frame bender and turner
- Steel bender and fixer (reinforced concrete)

**7215 Riggers and Cable Splicers**

Riggers and cable splicers assemble rigging gear to move and position equipment and structural components, or install and maintain cables, ropes and wires on construction sites, buildings or other structures.

Tasks include:

- estimating the size, shape and weight of objects to be moved and deciding on the type of equipment to move them
- installing and repairing cables, ropes, wires, pulleys and other tackle
- joining, repairing and fitting attachments to wires, ropes and cables
- working as member of crew erecting and repairing derricks for drilling water, gas- and oil wells
- lifting and mounting scenery, lighting and other equipment in theatres and on film sets
- installing and maintaining communication towers, aerial cableways, funicular railways, ski lifts and similar infrastructure

This unit group includes:

- Cable and rope splicer (general)
- Signaller and rigger (Construction)
- Underwater cable splicer

This unit group excludes:

- Scaffolding rigger (7119)
- Crane and hoist operator (8343)

**7221 Blacksmiths, Hammersmiths and Forging-Press Workers**

Blacksmiths, hammersmiths and forging-press workers, hammer and forge bars, rods or ingots of iron, steel and other metals to make and repair various kinds of tools, equipment and other articles, set machine tools for operators or set and operate various machine tools and polish and sharpen surfaces.

Tasks include:

- hammering and forging iron, steel and other metals to make and repair various kinds of tools, equipment and other articles
- setting machine tools for operators or setting and operating various machine tools working to fine tolerances
- polishing and sharpening metal surfaces and tools

This unit group includes:

- Hot-press operator (forging)
- Ironmongery worker
- Toolsmith

This unit group excludes:

- General machine tool operator (8125)

**7222 Toolmakers and Related Workers**

Toolmakers and related workers make and repair custom made and specialised tools, sports guns, locks, dies, patterns machinery components and other metal articles using hand and machine tools to work metal to fine tolerances.

Tasks include:

- reading and interpreting engineering drawings and specifications of tools, dies, prototypes or models
- preparing templates and sketches and determining work processes
- visualising and computing dimensions, sizes, shapes, and tolerances of assemblies, based on specifications
- positioning, securing and measuring metal stock or castings to lay out for machining
- setting up, operating and maintaining conventional and computer numerically controlled machine tools to cut, turn, mill, plane, drill, bore, grind or otherwise shape workpiece to prescribed dimensions and finish
- fitting and assembling parts to make and repair jigs, fixtures and gauges
- repairing and modifying sports guns and other small arms
- making, fitting, assembling, repairing and installing lock parts and locks
- making and repairing metal patterns for preparation of foundry moulds
- laying out lines and reference points on metal stock to guide other workers who cut, turn, mill, grind or otherwise shape metal
- verifying dimensions, alignments and clearances of finished parts for conformance to specifications, using precision measuring instruments and testing completed items for proper operation

This unit group includes:

- Jig and gauge maker
- Tap and die maker
- Template maker

**7224 Metal Polishers, Wheel Grinders and Tool Sharpeners**

Metal polishers, wheel grinders and tool sharpeners polish and grind metal surfaces and sharpen tools.

Tasks include:

- operating fixed or portable buffing and polishing machines
- sharpening cutting tools and instruments using grinding wheels or mechanically operated grinding machines
- repairing, adjusting and sharpening saw blades and metal teeth of cylinders in textile carding machines
- dressing grinding wheels, according to specifications
- monitoring machine operations to determine whether adjustments are necessary; stop machines when problems occur
- inspecting, feeling, and measuring work pieces to ensure that surfaces and dimensions meet specifications
- selecting and mounting grinding wheels on machines, according to specifications, using hand tools and applying knowledge of abrasives and grinding procedures

This unit group includes:

- Edge tool sharpener
- Metal buffing and polishing machine operator
- Saw repairer and sharpener

This unit group excludes:

- Precision grinding machine setter-operator (8125)

### 7231 **Motor Vehicle Mechanics and Repairers**

Motor vehicle mechanics and repairers fit, install, maintain, service and repair engines and the mechanical and related equipment of passenger cars, delivery trucks, motorcycles and other motor vehicles.

Tasks include:

- detecting and diagnosing faults in engines and parts
- fitting, examining, testing and servicing motor vehicle and motorcycle engines
- replacing engine components or complete engines
- fitting, examining, adjusting, dismantling, rebuilding and replacing defective parts of motor vehicles
- installing or adjusting motors and brakes, and adjusting steering or other parts of motor vehicles
- installing, adjusting, servicing and replacing mechatronics components of motor vehicles
- performing scheduled maintenance services, such as oil changes, lubrications and engine tune ups, to achieve smoother running of vehicles and ensure compliance with pollution regulations
- reassembling engines and parts after being repaired

This unit group includes:

- Motor vehicle body builder
- Garage mechanic (automobile)

This unit group excludes:

- Bicycle repairer (7233)

### 7232 **Aircraft Engine Mechanics and Repairers**

Aircraft engine mechanics and repairers fit, service, repair and overhaul aircraft engines and assemblies, such as airframes, hydraulic, and pneumatic systems.

Tasks include:

- fitting, examining, testing and servicing aircraft engines
- replacing engine components or complete engines
- examining and inspecting airframes and aircraft components, including landing gear, hydraulic systems and deicers to detect wear, cracks, breaks, leaks, or other problems
- maintaining, repairing, overhauling, modifying and testing aircraft structural, mechanical and hydraulic systems

- reading and interpreting manuals, service bulletins, and other specifications to determine the feasibility and method of repairing or replacing malfunctioning or damaged components
- maintaining, repairing, and rebuilding aircraft structures, functional components, and parts such as wings and fuselage, rigging, hydraulic units, oxygen systems, fuel systems, electrical systems, gaskets and seals
- inspecting completed work to certify that maintenance meets standards and the aircraft is ready for operation
- maintaining repair logs, documenting all preventive and corrective aircraft maintenance
- installing and testing electrical and electronic components, assemblies and systems in aircraft
- connecting components to assemblies such as radio systems, instruments, magnetos, inverters and in-flight refuelling systems

This unit group includes:

- Aeronautical mechanic
- Aircraft engine fitter-assembler
- Hydraulic systems mechanic (aircraft)

### 7233 **Other Machinery Mechanics and Repairers**

Other machinery mechanics and repairers fit, install, examine, service and repair engines, agricultural and industrial machinery and mechanical equipment, except motor vehicles, aircraft and electric motors.

Tasks include:

- fitting, installing, examining, servicing and repairing engines, machinery and mechanical equipment
- oiling and greasing stationary engines and machinery
- inspecting and testing new machinery and mechanical equipment for conformity with standards and specifications
- disassembling machinery and equipment to remove parts and make repairs
- examining parts for defects such as breakage and excessive wear
- operating newly repaired machinery and equipment to verify the adequacy of repairs
- recording repairs and maintenance performed

This unit group includes:

- Accounting and calculating machine mechanic
- Coin machine repairer and servicer
- Machinery fitter-assembler (general)



**7300 Supervisors and General Foremen (Precision, Handicraft, Printing and Related Trades)**

Supervisors and general foremen in precision, handicraft, printing and related trades supervise production activities within a distinct unit of an establishment in which precision instruments, musical instruments, jewellery, pottery and glass products are fabricated or within a unit specialising in typesetting and related work in a printing establishment, and control and coordinate the activities of workers in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- General foreman (ceramics manufacturing)
- Supervisor and general foreman (jewellery manufacturing)
- Supervisor and general foreman (precision instrument manufacturing)

**7311 Precision Instrument Makers and Repairers**

Precision instrument makers and repairers make, calibrate, repair, maintain, adjust and install mechanical watches, clocks, nautical, meteorological, optical, orthopaedic and other precision instruments and equipment and set them for correct performance.

Tasks include:

- repairing, cleaning, and adjusting mechanisms of timing instruments, such as watches and clocks
- adjusting timing regulators, using callipers, watch-rate recorders and tweezers
- cleaning, rinsing, and drying timepiece parts, using solutions and ultrasonic or mechanical watch-cleaning machines
- testing timepiece accuracy and performance, using meters and other electronic instruments
- testing accuracy of meters, gauges, indicators, or other recording or controlling instruments to locate defective components and for conformance to standards
- calibrating instruments or scales, using hand tools, computer or electronic devices
- inspecting components, connections, and drive mechanisms to detect defects
- assembling instruments and devices, such as barometers, control valves, gyroscopes, hygrometers, speedometers, tachometers and thermostats
- testing, calibrating, and adjusting electronic, mercurial, aneroid and other types of meteorological instruments for compliance with printed specifications and schematic diagrams, using voltmeters, oscilloscopes, tube testers and other test instruments

- adjusting and repairing masts, supporting structures, clearance lights, control panels, control cabling and wiring and other electrical and mechanical devices
- repairing and setting optical instruments such as microscopes, telescopes, theodolites, sextants
- checking whether assembled units conform to specifications and ensuring stipulated performance and sensitivity by standard tests

This unit group includes:

- Precision instrument calibrator
- Chronometer assembler
- Watch and clock repairer

### 7312 **Musical Instrument Makers, Repairers and Tuners**

Musical instrument makers, repairers and tuners make, assemble, repair, adjust, restore musical instruments and tune them to the required pitch with hand or power tools. They usually specialise in one type of instrument, such as string instruments, brass instruments, pianos, reed instruments or percussion instruments.

Tasks include:

- fabricating and assembling musical instruments and instrument parts of wood, ebony, metal, leather and other materials
- repairing or replacing musical instrument parts and components, such as strings, bridges, felts, and keys, using hand and power tools
- playing and inspecting instruments to evaluate their sound quality and to locate any defects
- adjusting string tensions to achieve proper tone or pitch of stringed instruments
- adjusting lips, reeds, or toe hole of organ pipes, using hand tools, to regulate airflow and loudness of sound
- tuning and servicing pipe organs by adjusting pitch of organ pipes to conform with pitch of tuning fork and adjusting pitch of other pipes with references to pitch of tuned pipes
- installing new drumheads in percussion instruments
- tuning accordions by aurally comparing pitch of reeds with master reeds and filing reeds to obtain standard pitch
- aligning pads and keys on reed or wind instruments
- tuning percussion instruments to required pitch by tightening or loosening cords holding leather pieces fixed atop or at both ends of instrument
- assembling and installing new pipe organs and pianos in buildings

This unit group includes:

- Metal musical wind instrument maker
- Tone regulator (musical instrument)
- Woodwind instrument maker

**7313 Jewellery and Precious Metal Workers**

Jewellery and precious metal workers design, fabricate, adjust, repair, or appraise jewellery, ceremonial or religious items, gold, silver, other precious metals or gems. They cut, file, polish and set precious and semi-precious stones including gems and diamonds and engrave designs on jewellery and precious metal articles. They cut and polish diamonds for industrial purposes.

Tasks include:

- casting jewellery and other non-ferrous metal articles by hand
- creating new jewellery designs and modifying existing designs, using computers as necessary
- cutting designs in moulds or other materials to be used as models in the fabrication of metal and jewellery products
- altering existing jewellery mountings in order to reposition jewels or to adjust mountings
- repairing, reshaping and restyling old jewellery or precious metal ware following designs or instructions
- making complete jewellery articles such as rings, necklaces, bangles, brooches and bracelets from materials such as gold, silver, platinum, and precious or semiprecious stones
- examining gem surfaces and internal structures, using polariscopes, refractometers, microscopes, and other optical instruments to differentiate between stones, identify rare specimens or to detect flaws, defects, or peculiarities affecting gem values
- cutting and polishing gems and setting them in jewellery articles
- engraving or embossing letters, designs or decorative lines on jewellery and precious metal ware
- grinding, drilling and finishing jewel bearings for use in precision instruments such as compasses and chronometers
- examining assembled or finished products to ensure conformance to specifications, using magnifying glasses or precision measuring instruments

This unit group includes:

- Industrial diamond cutter and polisher
- Jewellery enameller
- Jewellery repairer

**7314 Potters and Related Workers**

Potters and related workers prepare pottery, porcelain ware, sanitary ware, bricks, tiles and abrasive wheels by hand or by machine.

Tasks include:

- making articles of pottery and porcelain
- making clay or plaster of Paris moulds
- reading technical drawings to know customer's requirements
- forming articles on potters' wheel by pressing thumbs into centres of revolving clay to form hollows, and press on the inside and outside of emerging clay cylinders with hands and fingers, gradually raising and shaping clay to desired forms and sizes

- adjusting wheel speeds according to the feel of the clay as pieces enlarge and walls become thinner
- operating jigger machines to form ceramic ware, such as bowls, cups, plates, and saucers
- adjusting and setting controls of pug mill that mixes, extrudes, cuts, and deposits clay charges in or over moulds as specified
- smoothing surfaces of finished pieces, using rubber scrapers and wet sponges
- forming abrasive wheels by moulding and pressing an abrasive mixture by hand or by machine
- examining finished ware for defects, verifying accuracy of shapes and sizes of objects, using callipers and templates
- preparing work for sale or exhibition, and maintaining relationships with retail, pottery, art, and resource networks that can facilitate sale or exhibition of work

This unit group includes:

- Pottery and porcelain jiggerman
- Pottery and porcelain turner
- Tile and brick moulder

#### 7315 **Glass Makers, Cutters, Grinders and Finishers**

Glass makers, cutters, grinders and finishers blow, mould, press, cut, trim, grind and polish glass, shape molten glass according to patterns.

Tasks include:

- heating glass to pliable stage, using gas flames or ovens, and rotating glass to heat it uniformly
- blowing and bending glass tubing into specified shapes to form scientific apparatus like flasks, retorts, pipettes
- grinding and polishing glass objects or parts to correct defects or to prepare surfaces for further finishing and smoothing and polishing rough edges, using belt sander or polishing wheels
- examining glass stock and finished products and marking or discarding items with defects such as spots, stains, scars, snags, chips, scratches, or unacceptable shapes or finishes
- reading work orders to determine dimensions, cutting locations, and quantities to cut
- observing gauges, computer printouts and video monitors to verify specified processing conditions and make adjustments as necessary
- positioning pattern or drawing on glass, measuring dimensions, and marking cutting lines, using glass cutting tools and cutting glass along marked outlines or around pattern
- setting up, operating and adjusting computerised or robotic glass cutting equipment
- inspecting, weighing, and measuring products to verify conformance to specifications, using instruments such as micrometers, callipers, magnifiers, and rulers
- regulating oven temperatures according to glass types to be processed

- transferring pattern for individual stained glass parts from full size drawing to pattern paper, using stylus to trace drawings
- spraying silver solution on glass to provide mirrored surface, using spray gun
- laying out cutting and grinding optical and other glass to specified dimensions and weight for moulding into lens blanks and for use as watch crystals

This unit group includes:

- Glass blower (scientific glass)
- Glass cutter (optical glass)
- Lens polishing machine operator

### 7316 **Sign Writers, Decorative Painters, Engravers and Etchers**

Sign writers, decorative painters, engravers and etchers decorate articles made of wood, metal, textiles, glass, ceramics and other materials. They plan, lay out and paint letters, figures, monograms and designs to make signs and engrave and etch ornamental and floral designs on glass and other articles.

Tasks include:

- painting decorative free-hand designs on objects, such as pottery, glass, cigarette cases, lampshades
- transferring from paper transfers decorative or ornamental designs on articles
- integrating and developing visual elements, such as line, space, mass, colour, and perspective, in order to produce desired effects such as the illustration of ideas, emotions or moods
- laying out and painting in one or more languages letters, figures, monograms and designs to make signs
- sketching or tracing design or lettering onto work piece or pattern material to prepare pattern or stencil designing pattern or lettering to paint work pieces, such as signs, glassware, pottery or zinc plates
- using software and routing equipment to produce 3D carved images for application onto larger signage as well as engraved and inlaid signs
- designing and producing normal flat cut lettering or lettering that is shadowed with applied vinyl or lettering that is ready cut for application
- writing, painting, or printing signs or show cards used for display or other purposes
- cutting out letters and signs for display purposes from wallboard or cardboard, by hand or machines, such as electrically powered jigsaw or bandsaw
- examining sketches, diagrams, samples, blueprints, or photographs to decide how designs are to be etched, cut or engraved onto work pieces
- measuring and computing dimensions of lettering, designs or patterns to be engraved
- engraving and printing patterns, ornamental designs, etchings, trademarks, figures or lettering onto flat or curved surfaces of a wide variety of metal, glass, plastic or ceramic items
- etching decorative designs, calibration markings and other figures on glass articles

This unit group includes:

- Aerographing decorator (ceramics)
- Brush painter (except construction)
- Glass sandblaster

**7321 Pre-Press Trades Workers**

Pre-press trades workers proof, format, set and compose text and graphics into a form suitable for use in various printing processes and representation in other visual media.

Tasks include:

- operating graphic cameras and other photographic equipment to reproduce camera-ready copy onto films, plates and digital output devices
- using computer applications to generate images, text, layouts and impositions for print and other visual media displays
- operating plate making equipment to reproduce images from film to printing plates, digital output devices and presses
- operating computer screen-based equipment for scanning, colour separation, colour correction, masking, creative design, combining, imposing, retouching, and other processes used to transfer copy to film and produce film for plate, digital output and cylinder productions
- carrying out digital and chemical proofing from digital systems, and negative and positive films
- evaluating printed proofs, checking and correcting them for quality
- preparing and exposing carbon tissue for laying on cylinders by transfer method, and developing images

This unit group includes:

- Composing machine operator (linotype)
- Electrotype caster
- Music printing engraver

**7322 Printers**

Silk-screen, block and textile printers cut stencils for use in silk-screen printing and print on paper, metal, textiles and other materials with silk-screens, blocks of rubber, wood or other materials, or engraved printing rollers.

Tasks include:

- cutting stencils for silk-screen printing
- printing on paper, metal, textiles and other materials by silk-screen process
- printing designs and patterns on cloth or wallpaper with engraved blocks or machines equipped with engraved rollers
- performing related tasks
- supervising other workers

This unit group includes:

- Block printer
- Silk screen printer
- Textile printer

**7400 Supervisors and General Foremen (Electrical and Electronic Trades)**

Supervisors and general foremen in electrical and electronic trades supervise production activities within a distinct unit of an establishment concerned with electrical or electronic machinery and equipment, and control and coordinate the activities of workers in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- General foreman (electrical and electronic installation and repair)
- Supervisors and general foreman (electrical and electronic trades)
- Supervisor and general foreman (M&E)

**7411 Electricians**

Electricians install, maintain and repair electrical wiring systems and related equipment and fixtures.

Tasks include:

- installing, maintaining and repairing electrical wiring systems and related equipment in various buildings such as schools, hospitals, commercial establishments, residential buildings, other structures and machineries
- examining blueprints, wiring diagrams and specifications to determine sequences and methods of operation
- planning layout and installation of electrical wiring, equipment and fixtures, based on job specifications and relevant standards
- inspecting electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or repair
- selecting, cutting and connecting wire and cable to terminals and connectors
- measuring and laying out installation reference points
- positioning and installing electrical switchboards
- testing continuity of circuit

This unit group includes:

- Aircraft electrician
- Gaffer
- Installation electrician (building)

**7412 Electrical Mechanics and Fitters**

Electrical mechanics and fitters fit, adjust, install and repair electrical machinery and other electrical apparatus and equipment in buildings, factories, workshops or other places.

Tasks include:

- fitting, adjusting and repairing various kinds of electrical machinery and motors, generators, switchgear and control apparatus, instruments, or electrical parts of elevators and related equipment
- fitting, adjusting and repairing electrical parts in domestic appliances, industrial machines and other appliances
- inspecting and testing manufactured electrical products
- installing, testing, connecting, commissioning, maintaining and modifying electrical equipment, wiring and control systems
- designing, installing, maintaining, servicing and repairing electric and hydraulic passenger and freight lifts, escalators, moving walkways and other lift equipment
- connecting electrical systems to power supply
- replacing and repairing defective parts

This unit group includes:

- Dynamo fitter
- Electrical elevator and related equipment fitter
- Signage installer (electronic)

**7413 Electrical Line Installers and Repairers**

Electrical line installers and repairers install, repair and join electrical transmission and supply cables and related equipment.

Tasks include:

- installing and repairing overhead and underground electrical power and electrical traction lines
- making joints in overhead and underground cables
- adhering to safety practices and procedures, such as checking equipment regularly and erecting barriers around work areas
- opening switches or attaching grounding devices to remove electrical hazards from disturbed or fallen lines or to facilitate repairs
- climbing poles or using truck-mounted buckets to access equipment
- identifying defective sectionalising devices, circuit breakers, fuses, voltage regulators, transformers, switches, relays, or wiring, using wiring diagrams and electrical-testing instruments

This unit group includes:

- Overhead wireman (electric power)
- Underground cable layer



**7421 Electronics Mechanics and Servicers**

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

Tasks include:

- examining and testing machines, instruments, components, other equipment, instruments and control systems to identify faults
- adjusting, repairing and replacing worn and defective parts and wiring, and maintaining machines, equipment and instruments
- reassembling, test operating and adjusting equipment
- installing electronic instruments and control systems
- coordinating work with that of engineers, technicians and other maintenance personnel
- interpreting test data to diagnose malfunctions and systemic performance problems
- installing, adjusting, repairing or replacing electrical and electronic components, assemblies, and systems using hand tools, power tools or soldering irons
- connecting components to assemblies such as radio systems, instruments, magnetos, inverters and in-flight refuelling systems
- keeping records of maintenance and repair work

This unit group includes:

- Electronics fitter (radio, television and radar equipment)
- Electronic meteorological equipment fitter
- Electronic prototype fitter

**7422 Information and Communications Technology Installers and Servicers**

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

Tasks include:

- maintaining, troubleshooting, testing and repairing computers, data transmission equipment and computer peripherals
- fitting and adjusting computer hardware
- installing, maintaining, repairing, and diagnosing malfunctions of microwave, telemetry, multiplexing, satellite and other radio and electromagnetic wave communications systems
- providing technical advice and information, and monitoring the performance of complex telecommunications networks and equipment
- installing and repairing cabling for computer, radio, telephone and television transmission
- joining telecommunications and data cables and sealing sheathes
- installing, maintaining and repairing antennae used in communications

This unit group includes:

- Overhead wireman (telephone and telegraph)
- Radio transmitter fitter
- Telegraphic mechanic

**7500 Supervisors and General Foremen (Food Processing, Woodworking, Garment, Leather and Related Trades)**

Supervisors and general foremen in food processing, woodworking, garment, leather and related trades supervise production activities within a distinct unit of an establishment in which specific knowledge and skills are used for processing foodstuffs and beverages, preparation of fibres, treatment of wood, manufacture of wooden furniture, fur articles, made-to-order garments, footwear and leather goods, and control and coordinate the activities of workers in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- General foreman (leather goods making)
- Supervisor and general foreman (furniture and related products manufacturing)
- Supervisor and general foreman (shoemaking)

**7511 Meat and Fish Preparers**

Meat and fish preparers slaughter animals, clean, cut and dress meat and fish, remove bones and prepare related food items or preserve meat, fish and other foods and food products by drying, salting or smoking.

Tasks include:

- slaughtering animals
- flaying and trimming carcasses
- boning, cutting and dressing meat and fish for sale or further processing
- preparing ingredients and making sausages and similar products using chopping, mixing and shaping machines
- curing meat, fish and other foods
- operating smokehouses or ovens to smoke meat, fish and other foodstuffs
- cooking or in other ways preparing meat, fish and related food items for sale

This unit group includes:

- Fish smoker
- Meat dresser (general)
- Poultry slaughterer

**7512 Bakers, Pastry and Confectionery Makers**

Bakers, pastry-cooks and confectionery makers make various kinds of bread, cakes, and other flour products, as well as handmade chocolate and sugar confectionery.

Tasks include:

- making bread, cakes, biscuits, pastries, pies and other flour products
- making handmade confectionery from mixtures of sugar, chocolate and other ingredients using hand tools and some machines
- combining measured ingredients in bowls of mixing, blending, or cooking machinery
- checking the quality of raw materials to ensure that standards and specifications are met
- applying glazes, icings, or other toppings to baked goods, using spatulas or brushes
- checking the cleanliness of equipment and operation of premises before production runs to ensure compliance with occupational health and safety regulations
- monitoring oven temperatures and product appearance to determine baking times
- coordinating the forming, loading, baking, unloading, de-panning and cooling of batches of bread, rolls, pastry and confectionery products

This unit group includes:

- Confectionery mixer (flour)
- Dough maker (bread)
- Pastry baker

**7515 Food and Beverage Tasters and Graders**

Food and beverage tasters and graders inspect, taste and grade various types of agricultural products, food and beverages.

Tasks include:

- inspecting, testing, tasting and smelling agricultural products, food and beverages at various stages of processing
- determining quality, acceptability to consumer tastes and approximate value of products and grading them into appropriate classes
- discarding inferior products
- recording the grade and/or identification numbers on tags, receiving, or sales sheets
- weighing and measuring products

This unit group includes:

- Coffee and tea taster

**7519 Food Processing and Related Trades Workers Not Elsewhere Classified**

This unit group consists of food processing and related trades workers not elsewhere classified in Minor Group 751 'Food processing and related trades workers'. Those who perform miscellaneous food processing and related tasks are classified here.

Tasks include:

- preparing, inspecting, testing and tasting food products at various stages of processing to determine quality and grade into appropriate class
- performing related tasks

This unit group includes:

- Chinese medicated wine maker
- Jam maker
- Vegetable pickler

**7521 Wood Treaters**

Wood treaters operate and tend wood treatment processing equipment and machines to remove bark from logs, produce wood chips, season, preserve and treat wood, and produce waferboards, particleboards, hardboards, insulation boards, plywood, veneers and similar wood products.

Tasks include:

- operating and tending kilns, treating tanks and other equipment to dry lumber, prepare and season wood and other wood products, and to treat chemically and impregnate wood products with preservatives
- monitoring equipment operation, gauges, and panel lights in order to detect deviations from standards and to ensure that processes are operating according to specifications
- assisting in maintaining processing equipment and machines as required
- cleaning, lubricating and adjusting equipment
- transporting materials and products to and from work areas, manually or using carts, handtrucks or hoists
- completing and maintaining production reports

This unit group includes:

- Dry kiln operator
- Wood seasoner
- Wood treater

**7522 Cabinet Makers and Wood Related Trades Workers**

Cabinet makers and related workers make, decorate and repair wooden furniture, carts and other vehicles, wheels, parts, fittings, patterns, models and other wooden products using woodworking machines, machine tools and specialised hand tools.

Tasks include:

- operating woodworking machines, such as power saws, jointers, mortisers and shapers, and using hand tools to cut, shape and form parts and components
- studying plans, verifying dimensions of articles to be made, or preparing specifications and checking the quality and fit of pieces in order to ensure adherence to specifications
- trimming joints and fitting parts and subassemblies together to form complete units using glue and clamps, and reinforcing joints using nails, screws or other fasteners
- making, restyling and repairing various wooden articles, such as cabinets, furniture, vehicles, scale models, sports equipment and other parts or products
- decorating furniture and fixtures by inlaying wood, applying veneer and carving designs
- finishing surfaces of wooden articles or furniture

This unit group includes:

- Furniture maker (wood)
- Veneer applier
- Wooden model maker

**7529 Furniture Makers and Related Trades Workers Not Elsewhere Classified**

This unit group consists of furniture makers and related trades workers not elsewhere classified in Minor Group 752 'Wood treaters, cabinet makers and related trades workers'. Those who perform other wood making processes and related tasks are classified here.

Tasks include:

- making wicker furniture from peeled and softened rattan, reeds, rushes, willow branches and similar materials
- making various kinds of baskets by interlacing osier, rattan, reeds, rushes or similar materials
- selecting and preparing brush materials, such as bristles, nylon, fibres and wire and setting them in brush base
- selecting and preparing materials, such as broom corn, bass and whisker fibre, and fastening them to broom handles
- performing related tasks

This unit group includes:

- Basket maker
- Bamboo screen maker
- Furniture maker (basketry)

**7531 Tailors/Dressmakers**

Tailors, dressmakers, fabricate, fit, alter and repair tailored or hand-made clothing. They produce made-to-measure clothing such as suits, overcoats, and dresses from textile fabrics, and other material, according to customers' and clothing manufacturers' specifications.

Tasks include:

- making overcoats, suits, skirts, shirts, blouses, lingerie, corsetry and similar garments often to clients' individual requirements
- selecting textile fabrics, leather or fur pelts matching the desired size, colour, texture, and quality of the garment; cutting to shape them to garment pattern and arranging them on pattern according to the design of the garment
- making garment style changes, such as tapering trouser legs, narrowing lapels, and adding or removing padding
- selecting and modifying commercial patterns to customers' and clothing manufacturers' specifications and fit
- fitting, altering and repairing tailored clothing, dresses, coats and other made-to-measure garments according to customers' requests
- making and caring for costumes used in theatrical, television and motion picture productions

This unit group includes:

- Dressmaker
- Gown maker
- Tailor (made-to-measure garment)

**7532 Garment and Related Pattern-Makers and Cutters**

Textile, leather and related patternmakers and cutters create precision master patterns for production of garments, other textiles, and leather or fur products. They mark, cut, shape and trim textile, light leather and other materials according to blueprints or specifications in the manufacture of garments, hats and caps, gloves and miscellaneous products.

Tasks include:

- creating a master pattern for each size within a range of garment sizes, using charts, drafting instruments, computers, and/or grading devices
- creating the “blueprint” or pattern pieces for a particular apparel design with the aid of a computer
- calculating dimensions of patterns according to sizes, considering stretching of material
- drawing details on outlined parts to indicate where the parts are to be joined, as well as the positions of pleats, pockets, buttonholes on garments, decorative stitching on shoe parts or eyelets on canvas products, using computers or drafting instruments
- positioning templates or measuring materials to locate specified points of cuts or to obtain maximum yields and mark fabric accordingly
- laying out master pattern on fabric and cutting sample pattern
- testing patterns by making and fitting sample garments

- placing patterns on top of layers of fabric and cutting fabric following patterns, using electric or manual knives, cutters or computer numerically controlled cutting devices
- cutting fabric or fur pelts to make parts for garments and other fur articles
- trimming excess material or cutting threads off finished products, such as cutting loose ends of a finished product
- positioning leather on cutting bed of machine, maximising usage according to skin grain, skin flaws and skin stretch
- performing pattern-making, marking and cutting tasks in the manufacture of other products such as soft furnishings and canvas goods

This unit group includes:

- Garment cutting marker
- Garment patternmaker
- Tailor's cutter

#### 7534 **Upholsterers and Related Workers**

Upholsterers and related workers install, repair and replace upholstery of furniture, fixtures, orthopaedic appliances; seats, panels, convertible and vinyl tops and other furnishings of automobiles, railway coaches, aircraft, ships and similar items with fabric, leather, rexine or other upholstery material. They also make and repair cushions, quilts and mattresses.

Tasks include:

- discussing upholstery fabric, colour, and style with customers and providing cost estimate for upholstering furniture or other items
- making upholstery patterns from sketches, customer descriptions or blueprints
- laying out, measuring and cutting upholstery materials following patterns, templates, sketches, or design specifications
- installing, arranging and securing springs, padding and covering material to furniture frames
- sewing upholstery materials by hand to seam cushions and joining sections of covering materials
- sewing rips or tears in material, or creating tufting, using needle and thread
- tacking, gluing or sewing ornamental trims, buckles, braids, buttons and other accessories to covers or frames on upholstered items
- laying out, cutting, fabricating and installing upholstery in aircrafts, motor vehicles, railway cars, boats and ships
- repairing raw hide covering of artificial limbs
- renovating antique furniture using a variety of tools including ripping chisels, magnetic hammers and long needles
- collaborating with interior designers to decorate rooms and coordinate furnishing fabrics
- making quilts, cushions and mattresses

This unit group includes:

- Bedding maker
- Mattress sewer
- Rail-carriage upholsterer

**7536 Shoemakers and Related Workers**

Shoemakers and related workers make, modify and repair standard, custom or orthopaedic footwear and natural or synthetic leather articles, such as luggage, handbags and belts, (except for leather garments, hats and gloves), or participate in the manufacture of shoes and related goods. They decorate, reinforce or finish shoes, luggage, handbags and belts.

Tasks include:

- making, modifying and repairing standard footwear to meet individual requirements
- making, modifying and repairing orthopaedic or therapeutic footwear according to doctors' prescriptions, or modifying existing footwear for people with foot problems and special needs
- repairing belts, luggage, purses and similar products
- taking plaster casts of deformed legs or foot to prepare drawings
- preparing inserts, heel pads, and lifts from casts of customers' feet
- studying drawings and other specifications to make footwear according to customer's needs
- studying work orders and/or shoe part tags to obtain information about workloads, specifications, and the types of materials to be used
- checking the texture, colour, and strength of leather to ensure that it is adequate for a particular purpose
- cutting out, shaping and padding parts for making leather articles
- sewing rips or patching holes to repair articles, such as purses, belts, shoes, and luggage
- removing and examining shoes, shoe parts, and designs to verify conformance to specifications such as proper embedding of stitches in channels
- attaching accessories or ornamentation to decorate or protect products
- making and repairing articles such as saddles and harnesses for animals, luggage, handbags, brief-cases, leather bags, belts and other accessories

This unit group includes:

- Orthopaedic footwear maker
- Perforating machine operator (shoe finishing)
- Surgical boot and shoe maker



**7539 Garment and Related Trades Workers Not Elsewhere Classified**

This unit group consists of garment and related trades workers not elsewhere classified in Minor Group 753 'Garment, leather and related trades workers'. Those who perform other garment making and related tasks are classified here.

Tasks include:

- performing various sewing tasks in making, altering and repairing articles of textile, leather and other materials
- embroidering decorative designs on garments or materials
- inspecting and testing products, parts and materials for conformity with specifications and standards
- grading and classifying natural textile fibres for spinning and winding
- assembling and covering umbrellas
- sorting and grading pelts, hides and skins
- treating hides to convert them into leather
- applying dyes to fur pelts
- dressing and applying dyes and stains to leather
- performing related tasks

This unit group includes:

- Cloth grader
- Fabrics repairer
- Tent maker

**7540 Other Craft and Related Workers**

Other craft and related workers work under the surface of water, using underwater breathing apparatus; position, assemble, and detonate explosives; inspect and test, raw materials, manufactured components and products; remove unwanted organisms to prevent damage to crops and buildings and other structures. This group includes other trade and craft occupations not classified elsewhere in Major Group 7 'Craftsmen and related trades workers'.

Tasks include:

- ensuring safety precautions
- performing various underwater tasks
- loading explosives into blast holes
- mixing chemicals according to instructions
- operating and monitoring equipment for spraying pests and weeds

This unit group includes:

- Construction diver
- Rubber stamp maker
- Wig maker
- Salvage diver

**8100 Stationary Plant and Machine Supervisors and General Foremen**

Stationary plant and machine supervisors and general foremen supervise production activities of a distinct unit at a well drilling site; or within establishment engaged in processing of mineral ore and stone, metal, wood, or chemicals; within establishment concerned with the production and distribution of electricity, steam or gas, or with water supply, sewage disposal and treatment; or refrigeration and assimilated services; or within establishment in which machines are used in the manufacturing of various products on an industrial basis and control and coordinate the activities of workers in various occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- General foreman (metal processing)
- General foreman (chemical processing)
- Industrial plant supervisor and general foreman

This unit group excludes:

- Assembly and quality check supervisor and general foreman (8200)

**8113 Well Drillers and Borers and Other Mining Related Workers**

Well drillers and borers and other mining related workers operate, assemble and monitor machines for cutting channels in mine workforce or for the drilling and sinking of wells, extract ore, liquids and gases or for a variety of other purposes.

Tasks include:

- operating and monitoring machinery and equipment used for continuous mining or for drilling holes or cutting channels in a mine or quarry workface
- operating and monitoring machinery and equipment used for drilling and sinking of wells
- dismantling, moving and assembling drilling rigs and auxiliary equipment
- assembling and dismantling pipes, casings and drill heads and replacing dysfunctional equipment
- preparing drilling fluid and checking the operation of pumps to ensure adequate circulation of fluid in drill pipe and well
- maintaining records of drilling and servicing operations
- closing and sealing wells no longer in use

This unit group includes:

- Derrickman
- Cable Driller
- Rotary Driller
- Acidiser
- Fishing-tool operator (oil and gas wells)

#### 8114 **Cement and Other Mineral Products Machine Operators**

Cement and other mineral products machine operators operate and monitor machines for manufacturing and finishing precast concrete, bitumen and making cast stone for building purposes.

Tasks include:

- setting up and operating stationary plant and machinery which grind, crush, cut, saw and slice rocks, minerals and stones according to the specifications for the job
- operating extrusion, moulding, mixing, pumping, compacting, grinding and cutting machinery to manufacture and finish precast concrete and other mineral products
- operating machines to produce cement, lime and clinker, including loading and unloading ingredients and operating continuous feed equipment such as pumps and conveyors
- operating machines which weigh and mix sand, gravel, cement, water and other ingredients to make concrete
- operating machines which assembles and fills moulds with concrete and artificial stone mixtures, removes castings from moulds and finishes surfaces of precast products
- cutting, grinding, drilling, sandblasting and polishing concrete products and stone blocks, slabs and products to the specifications for the job
- collecting and examining samples of mixtures and finished products for conformity to specifications and adjusting machine settings accordingly
- arranging and assisting with machinery maintenance and repair

This unit group includes:

- Fibro-cement machine operator
- Asbestos cement product making machine operator
- Terrazzo tile making machine operator
- Concrete pump operator

#### 8121 **Metal Melters, Casters and Rolling Mill Operators**

Metal melters, casters and rolling mill operators operate, monitor, adjust and maintain machinery and equipment to process and convert mineral ores, cast, roll metals.

Tasks include:

- setting up, preparing and adjusting metal processing machinery to process and convert mineral ores or cast metals or roll metals
- operating machinery to convert, cast or roll metals and mineral ores
- observing gauges, meters, computer printouts, video monitors and products to ensure correct operation of machine and verify specified processing conditions
- adjusting equipment, valves, pumps, controls and process equipment

- controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment
- verifying equipment for malfunctions, carrying out routine operating tests and arranging for maintenance
- analysing sample products, performing tests, recording data and writing production logs

This unit group includes:

- Bar mill roller
- Continuous rod casting machine operator
- Cupola furnaceman
- Metal pourer

### 8122 **Metal Heat Treating Plant Operators**

Metal heat treating plant operators operate, monitor, adjust and maintain machinery and equipment to treat and process metals.

Tasks include:

- setting up, preparing and adjusting metal processing machinery to treat and process metals
- operating machinery to treat and process metals
- observing gauges, meters, computer printouts, video monitors and products to ensure correct operation of machine and verify specified processing conditions
- adjusting equipment, valves, pumps, controls and process equipment
- controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment
- verifying equipment for malfunctions, carrying out routine operating tests and arranging for maintenance
- analysing sample products, performing tests, recording data and writing production logs

This unit group includes:

- Metal annealer
- Cyanide hardener
- Metal temperer
- Nitrider

### 8123 **Metal Drawers and Extruders**

Metal drawers and extruders draw and extrude metals through dies to make wire, pipes, tubes and similar products.

Tasks include:

- setting up, preparing and adjusting metal processing machinery to make wires, pipes tubes and similar metal products
- setting and operating a wire-drawing machine
- setting and operating a machine to draw seamless metal tubing
- setting and operating a hydraulic press to extrude metal rods, bars and seamless tubing

This unit group includes:

- Bar extruder operator (metal)
- Road extruder operator
- Seamless pipe and tube drawer

#### 8124 **Metal Finishing, Plating and Coating Machine Operators**

Metal finishing, plating and coating machine operators operate and monitor equipment which finishes, plates and coats metal articles or parts, in order to give them improved resistance to corrosion and abrasion, for decorative purposes, or to impart electrical or magnetic properties.

Tasks include:

- operating and monitoring equipment which cleans metal articles in preparation for electroplating, galvanising, enamelling or similar processes
- operating and monitoring electroplating equipment
- operating and monitoring hot-dip equipment used to coat iron and steel products
- operating and monitoring machines which automatically coat wire with non-ferrous metal
- operating and monitoring equipment used to spray molten metal or other substances on metal products to provide a protecting or decorative coating or to build up worn or damaged surfaces
- operating and monitoring equipment used to impart a rust-resistant finish to metal articles by treating them with chemicals and heating them
- checking proper thickness of plating using micrometers, callipers or other devices recording data and writing production logs
- preparing and mixing metalising solutions according to formulas or specifications

This unit group includes:

- Electroplater
- Galvaniser
- Metal sprayer
- Anodiser
- Sandblaster/Shotblaster (Metal)

#### 8125 **Machine-Tool Setter-Operators**

Machine-tool setter-operators set and/or operate, various machine tools working to fine tolerances.

Tasks include:

- setting one or more types of machine tool for production of metal articles in standardised series
- operating and monitoring metalworking machines, such as lathes, milling, planning, boring, drilling, grinding or honing machines, including multi-purpose numerically controlled metalworking machines
- observing machine operations to detect work piece defects or machine malfunctions, adjusting machines as necessary
- inspecting work pieces for defects, and measuring work pieces to determine accuracy of machine operation, using rules, templates, or other measuring instruments

- changing worn machine accessories, such as cutting tools and brushes, using hand tools

This unit group includes:

- Cylinder honer
- Metal bending machine operator
- Metal milling machine operator

### 8131 **Chemical Processing and Chemical Products Plant and Machine Operators**

Chemical processing and chemical products plant and machine operators monitor and operate chemical plants, units and machinery and adjust and maintain, processing units and equipment which distil, filter, separate, heat or refine chemicals, to blend, mix, process and package a wide range of chemical products.

Tasks include:

- operating and monitoring machinery which distil, filter, separate, heat or refine chemicals, to blend, mix, process and package a wide range of chemical products
- controlling the preparation, measuring and feeding of raw materials and processing agents such as catalysts and filtering media into plant
- controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment
- verifying equipment for malfunctions, carrying out routine operating tests and arranging for maintenance
- monitoring reaction processes and transfers of products in conformance with safety procedures
- taking samples and performing routine chemical and physical tests of products and recording production data

This unit group includes:

- Acetylene filler
- Candle making machine operator
- Formic acid plant operator

This unit group excludes:

- Pharmaceutical and toiletry products machine operators (8133)

### 8132 **Photographic Products Machine Operators**

Photographic products machine operators operate and monitor equipment which makes photographic film and paper and which processes exposed photographic film and makes prints.

Tasks include:

- operating and monitoring equipments which makes photographic film and paper
- operating, monitoring and testing photographic processing and printing equipment, and maintaining operational standards
- preparing exposed film for different processing batches in dark rooms and dark chambers
- inspecting images, films, prints and adjusting settings on print-making equipment to produce required colour, brightness, contrast, number, size and type of prints

- adjusting settings and running automatic developing equipment
- operating equipment to transfer film to video tape or other electronic media
- performing photographic processing related tasks
- operating automatic equipment (in retail establishments) to develop colour negatives, prints and slides

This unit group includes:

- Photograph developer
- Photograph printing machine operator
- Photographic plate maker
- Photographic print developer
- X-ray film developer

### 8133 **Pharmaceutical and Toiletry Products Machine Operators**

Pharmaceutical and toiletry products machine operators operate and monitor machines which process a variety of chemicals and other ingredients used in the production of pharmaceutical and toiletry products.

Tasks include:

- operating and monitoring equipment for moulding, filtering, fermenting, heating, mixing, grinding, filling and sealing materials used in the production of pharmaceutical, toiletry and related products
- maintaining operational standards of tablets and pills coating machines
- operating controls to regulate temperature, pressure, flow and speed of operation

This unit group includes:

- Tablets and pills coating machine operator
- Granulator machine operator
- Soap making machine operator

This unit group excludes:

- Chemical processing and chemical products plant and machine operators (8131)

### 8139 **Chemical Processing, Chemical and Photographic Products Plant and Machine Operators Not Elsewhere Classified**

This unit group covers other chemical processing, chemical and photographic products plant and machine operators not elsewhere classified in Minor Group 813 'Chemical processing, chemical and photographic products plant and machine operators'.

Tasks include:

- operating and monitoring equipment which produces electric cells or other chemical and photographic products

This unit group includes:

- Electric cell man

This unit group excludes:

- Lead oxide maker (8131)
- Candle making machine operator (8131)

**8141 Rubber Products Machine Operators**

Rubber products machine operators monitor and operate machines which knead and blend rubber and rubber compounds to produce various components and products from natural and synthetic rubber, such as moulded footwear, domestic articles, insulating materials, industrial accessories or tyres.

Tasks include:

- operating and monitoring machines which knead, mix and blend rubber and rubber compounds for further processing
- operating and monitoring machines which produces sheets of rubber or rubberised fabric by a rolling process
- operating and monitoring machines which extrude compounded rubber or shape vulcanised rubber by moulding
- operating and monitoring machines which build up tyres on a form, vulcanise tyres and mould or rebuild used tyres
- examining outputs for defects and conformity to specifications
- Locating defects and repairing worn and faulty tyres by vulcanising or other processes

This unit group includes:

- Tyre making machine operator
- Rubber laminating machine operator
- Rubber calendar machine operator

This unit group excludes:

- Rubber stamp maker (7540)

**8142 Plastic Products Machine Operators**

Plastic products machine operators monitor and operate machines which knead and blend compounds to obtain plastic materials, which make various plastic components and articles.

Tasks include:

- operating and monitoring machines which knead and blend compounds to obtain plastic materials
- operating and monitoring machines which shape plastic materials by moulding, extrusion, blowing, cutting and other means
- operating and monitoring machines which laminate plastics and plastic impregnated materials
- encasing uncoated wire, cord, cable and optic fibre in plastic
- examining outputs for defects and conformity to specifications
- making and repairing spectacle frames and plastic parts of orthopaedic appliances

This unit group includes:

- Plastics gauge and jig maker
- Plastics laminator
- Polythene bag making machine operator

This unit group excludes:

- Fibreglass maker (8181)



**8143 Paper and Paperboard Products Machine Operators**

Paper and paperboard products machine operators monitor and operate machines which produce boxes, envelopes, bags and other goods from paper, paperboard and other similar materials.

Tasks include:

- operating and monitoring machines which glue paper to cardboard, cut it to the required length or cut and crease cardboard or paperboard to form box blanks
- operating and monitoring machines which form drinking cups or other containers from paper, paperboard or cardboard
- operating and monitoring machines which cut, fold and glue paper to make envelopes and paper bags, or which form bags from other similar materials

This unit group includes:

- Toilet paper roll making machine operator
- Paper novelty maker
- Joss paper and other ceremonial paper maker

**8151 Fibre Preparing, Spinning and Winding Machine Operators**

Fibre-preparing, spinning and winding machine operators monitor and operate machines which prepare fibres and spin, double, twist and wind yarn and thread from natural textile fibres. They twist two or more strands of yarn to prepare single stronger, uniform and heavier strands and treat textiles to make them stiff and water resistant.

Tasks include:

- operating and monitoring machines for tearing woollen rags into fibre
- operating and monitoring machines for cleaning and turning woollen yarn waste into fluffed wool
- operating and monitoring machines which combine textile fibres into uniform blends
- operating and monitoring machines which clean and fluff textile fibres, transform them into sliver, comb them into sliver for first drawing, combine slivers into sliver lap or sliver laps into ribbon lap
- operating draw frame (machine) having number of drawing sets, each set combining several slivers into one of nearly same weight and thickness as any of original sliver
- operating and monitoring machines which spin thread and yarn from roving, wind two or more threads onto bobbin, twist two or more strands of yarn or thread into single strands of yarn to increase strength, smoothness and/or uniformity of yarn, or wind yarn or thread from one package to another
- operating and monitoring spinning frame that draws out and twists roving or sliver into yarn
- operating and monitoring machines for drawing slivers received from drawing machine into loosely twisted strands
- preparing sizing for use in stiffening and finishing cloth and yarn by mixing ingredients such as starch, tallow, resins, soap and water and boiling mixture for specified time in steam
- treating textiles with chemicals to make them water resistant

- cleaning rollers and cylinders of caring machines to remove wool waste
- operating and resurfacing metal drawing rolls of various spinning, combing and lapping machines with new rubber or leather covers

This unit group includes:

- Spinning frame operator (thread and yarn)
- Doubling machine operator (thread and yarn)
- Yarn twister
- Yarn winder

## 8152 **Weaving and Knitting Machine Operators**

Weaving and knitting machine operators set up, monitor and operate weaving and knitting machines which process yarn or thread into woven, non-woven and knitted products such as cloth, lace, carpets, rope, industrial fabric, hosiery and knitted garments or to quilt and embroider fabric.

Tasks include:

- setting up and operating batteries of automatic, link-type knitting machines to knit garments of specified pattern and design
- threading yarn, thread and fabric through guides, needles and rollers of machine for weaving, knitting or other processing
- tending automatic looms that simultaneously weave pile yarn, filling yarn, and warp yarn material to produce carpets and rugs with various coloured designs
- operating and monitoring loom on which yarn or twist is intersected and knotted at regular intervals to form mesh
- operating and monitoring large automatic multi-needle machines to embroider material or to sew lengths of several layers of material to make yard goods, quilts or mattress coverings
- tending circular knitting machines with automatic pattern controls that knit seamless hose
- operating and monitoring knitting machines to knit hosiery to shape of foot and leg
- operating and monitoring machine for knitting heel and toes of socks into ribs or tops cut from circular fabric
- operating and monitoring machine which seams opening in toes of socks
- operating and monitoring crocheter machine to knit lace, trimming etc of desired pattern or design
- examining looms to determine causes of loom stoppage, such as warp filling, harness breaks or mechanical defects
- repairing or replacing of worn or defective needles and other components
- cleaning, oiling and lubricating machines, using air hoses, cleaning solutions, rags, oil cans and/or grease guns

This unit group includes:

- Axminster weaver
- Carpet weaving loom operator
- Jacquard loom operator
- Fringing machine operator

This unit group excludes:

- Sewing machine operator (8153)

**8153 Sewing Machine Operators**

Sewing machine operators operate and monitor sewing machines to make, repair, darn and renovate textile, fur, synthetic or leather garments or embroider ornamental designs on garments or other materials. They operate button hole making and eyelet holing machines to cut holes, stitch around holes, stitch buttons and fix eyelets to garments.

Tasks include:

- operating or tending sewing machines to perform garment sewing operations, such as joining, reinforcing, seaming or decorating garments or garment parts
- attaching buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders
- tending semiautomatic sewing machines with multiple-sewing heads controlled by pattern chain that embroiders various designs on garments
- operating machines, such as single or double needle serging and flat-bed felling machines to automatically join, reinforce, or decorate material or articles
- operating stitching machines to sew leather parts together for leather garments, handbags, gloves
- monitoring machine operation to detect problems such as defective stitching, breaks in thread, or machine malfunctions
- performing equipment maintenance tasks such as replacing needles

This unit group includes:

- Garment-sewing machine operator
- Hat and cap sewer (machine)
- Embroidering machine operator
- Sewing machine operator (general)

This unit group excludes:

- Weaving and knitting machine operator (8152)

**8154 Bleaching, Dyeing and Fabric Cleaning Machine Operators**

Bleaching, dyeing and fabric cleaning machine operators operate and monitor machines that bleach, shrink, dye and otherwise treat fibres, yarn or cloth.

Tasks include:

- starting and controlling machines and equipment to bleach, dye or otherwise process and finish fabric, yarn, thread, and/or other textile goods
- tending machines that shrink woven or knitted cloth to predetermined size or strengthen the weave by interlocking the fibres
- operating and monitoring machines that treat silk to give it body and weight
- operating and monitoring machines that impregnate textiles with chemicals to render them waterproof
- dyeing articles to change or restore their colours
- operating and monitoring machines that stretch, or impart lustre, or other type of finish to textiles
- keying in processing instructions to programme electronic equipment
- observing display screens, control panels, equipment, and cloth entering or exiting processes to determine if equipment is operating correctly

This unit group includes:

- Textile-bleaching machine operator
- Yarn dyer
- Textile-shrinking machine operator
- Singeing machine operator

This unit group excludes:

- Laundry and dry cleaning machine worker (8159)

#### 8159 **Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified**

This unit group includes laundry and dry cleaning machine operators and operators of machines that produce textile, fur and leather products not elsewhere classified in Minor Group 815 'Textile, fur and leather products machine operators'.

Tasks include:

- operating and monitoring machines which mark patterns and cut shoe parts or sew shoe parts together or edge, polish, or apply ornaments and perform finishing tasks on shoes
- operating and tending machines that washes and dry garments
- operating and monitoring machines which make miscellaneous articles such as braids or other trimmings
- operating and monitoring machines to measure size of pieces of leather

This unit group includes:

- Laundry and dry cleaning worker (machine, non-household)
- Fishing net maker
- Braid making machine operator

This unit group excludes:

- Bleaching, dyeing and fabric cleaning machine operators (8154)

#### 8161 **Meat and Fish Products Machine Operators**

Meat and fish products machine operators operate and monitor meat and fish processing machines to manufacture meat and fish related products for human and animal consumption.

Tasks include:

- operating and monitoring machinery used for manufacturing meat and fish products

This unit group includes:

- Sausage making machine operator
- Autoclave operator (foodstuffs)
- Fish processing machine operator
- Meat processing machine operator
- Vacuum oven operator (foodstuffs)

**8162 Dairy and Confectionery Products Machine Operators**

Dairy and confectionery products machine operators set, operate and attend to machinery used to mix, bake and prepare dairy and confectionery products.

Tasks include:

- operating and monitoring machinery used for processing milk and cream and manufacturing dairy products

This unit group includes:

- Dairy product processing machine operator
- Dairy product pasteurising machine operator
- Ice-cream making machine operator
- Chocolate making machine operator
- Mogul operator (sugar confectionery)

**8163 Grain and Spice Milling Machine Operators**

Grain and spice milling machine operators set, operate and attend to machinery used to crush and grind grain and spice and related foodstuffs.

Tasks include:

- operating and monitoring machinery used for processing grain, spices or similar foodstuffs

This unit group includes:

- Corn milling machine operator
- Grain milling machine operator
- Husking machine operator (grain milling)
- Pearling machine operator (grain milling)
- Silksman (grain milling)

**8164 Baked and Cereal Products Machine Operators**

Baked and cereal products machine operators set, operate and attend to machinery used for processing baked and cereal related foodstuffs.

Tasks include:

- operating and monitoring machinery used for making biscuits, noodles and related foodstuffs

This unit group includes:

- Biscuit making machine operator
- Ovenman (biscuits)
- Macaroni making machine operator
- Vermicelli making machine operator
- Cereal processing machine operator

**8165 Fruit, Vegetable and Nut Products Machine Operators**

Fruit, vegetable and nut products machine operators set, operate and attend to machinery used for extracting juice, oils and fats from fruits, vegetable and nut products.

Tasks include:

- operating and monitoring machinery used for processing fruit, vegetable and nut products

This unit group includes:

- Fruit press operator
- Oil pressman (edible oils)
- Coconut oil miller
- Copra miller
- Gingili miller
- Blancher (nuts)
- Nut grinding machine operator

**8166 Sugar Processing and Refining Machine Operators**

Sugar processing and refining machine operators set, operate and attend to machinery used for processing and refining sugar.

Tasks include:

- operating and monitoring machinery used for processing and refining sugar

This unit group includes:

- Clarifier operator (sugar refining)
- Crystalliser operator (sugar refining)
- Sugar beet press operator
- Sugar sieve operator
- Sulphitation man (sugar refining)

**8167 Brewers and Wine and Other Beverage Machine Operators**

Brewers and wine and other beverage machine operators set, operate and attend to machinery used to process and produce beer, wines, malt liquors, coffee, tea and syrup.

Tasks include:

- operating and monitoring machinery used to crush, mix, malt, cook and ferment grains and fruits to produce beer, wines, malt liquors, coffee, tea and syrup
- operating and monitoring equipment to cool, heat, dry, roast, blanch, pasteurise, smoke, sterilise, freeze, evaporate and concentrate liquid

This unit group includes:

- Germination worker (malting)
- Malt fireman
- Fermenting room man
- Syrup making machine operator
- Yeast maker

**8168 Tobacco Products Machine Operators**

Tobacco products machine operators set, operate and attend to machinery used to process tobacco leaves to produce cigarette and other tobacco products.

Tasks include:

- operating and attending to machinery to process tobacco leaves to make cigarettes, cigars, pipe and other tobacco products

This unit group includes:

- Cigarette making machine operator
- Cheroot making machine operator
- Cigarette machine catcher

**8169 Food and Related Products Machine Operators Not Elsewhere Classified**

Food and related products machine operators not elsewhere classified set, operate and attend to machinery used to process and produce other food and related products for human and animal consumption.

Tasks include:

- operating and attending to machinery to make food and other related products e.g. bean curd, ice, fish meal

This unit group includes:

- Bean curd making machine operator
- Ice making machine operator
- Feed mixing machine operator
- Sago maker
- Tapioca miller

**8171 Pulp and Papermaking Plant Operators**

Pulp and papermaking plant operators operate and monitor multi-function process control machinery and processing equipment to control the processing of wood, scrap pulp and other cellulose materials in the production of pulp.

Tasks include:

- co-ordinating and monitoring the operation of screening equipment, washing equipment, digesters, mixing tanks and other pulp processing equipment from automated panel boards in central control room to control the processing of wood, scrap pulp, recyclable paper and other cellulose materials
- operating and monitoring screening equipment, bleaching equipment, digesters, mixing tanks, washers and other pulp processing machinery and equipment to carry out one or more cellulose processing steps
- controlling start-up and shut-down of process machinery and equipment, and observing equipment and machinery panel indicators, gauges, level indicators and other equipment instruments to detect machinery and equipment malfunctions and ensure process steps are carried out according to specifications
- analysing instrument readings and production test samples and making adjustments to pulp production process and equipment as required
- completing and maintaining production reports

This unit group includes:

- Paper pulp preparation plant operator
- Wood grinder
- Supercalendar operator
- Paper corrugating machine operator
- Varnishing machine operator (papermaking)

This unit group excludes:

- Paper and paperboard products machine operator (8143)

## 8172 **Wood Processing Plant Operators**

Wood processing plant operators monitor, operate and control automated lumber mill equipment for sawing timber logs into rough lumber, cutting veneer, making plywood and particle board and otherwise, preparing wood for further use.

Tasks include:

- examining logs and rough lumber to determine size, condition, quality and other characteristics to decide best lumber cuts to carry out, or operating automated equipment to convey logs through laser scanners which determine the most productive and profitable cutting patterns
- operating and monitoring log-in feed and conveyor systems
- operating and monitoring automated lumber mill equipment from control rooms or equipment consoles head saws, resaws and multiblade saws to saw logs, cants, flitches, slabs or wings and remove rough edges from sawn timber into dressed lumber of various sizes, and saw or split shingles and shakes
- operating and monitoring plywood core-laying machines and hot-plate plywood presses and machines which cut veneer
- cleaning and lubricating sawmill equipment

This unit group includes:

- Band-saw operator
- Sawyer
- Rotary veneer machine operator
- Plywood core layer
- Wood shavings machine operator

This unit group excludes:

- Wood products machine operator (8173)



**8173 Wood Products Machine Operators**

Wood products machine operators monitor and operate automatic and semi-automatic woodworking machines which perform repetitive work.

Tasks include:

- operating and monitoring woodworking machines for sawing, shaping, boring, planing, turning or carving wood

This unit group includes:

- Woodworking machine operator (general)
- Fret-saw operator
- Boring machine operator (woodworking)
- Pencil making machine operator
- Wood turning lathe operator

This unit group excludes:

- Wood processing plant operators (8172)

**8181 Glass and Ceramics Plant Operators**

Glass and ceramic plant operators monitor and operate kilns, furnaces and other machinery and equipment used in the manufacture of glass, ceramics, porcelain, tiles or bricks. They operate machines to anneal, harden or decorate glass and ceramics.

Tasks include:

- operating and monitoring glass-making furnaces to make glass by melting and fusing pre-mixed ingredients
- tending hot or cold-end spray equipment used to coat glassware with surface hardener
- operating and maintaining machines that press or blow molten glass in moulds to form or shape containers, such as bottles, jars and drinking glasses
- operating hand press to mould glass into required shape
- operating drawing kiln to process molten glass into continuous sheet of flat glass
- operating and monitoring floating-glass production plant
- operating and maintaining finishing machines to grind, drill, sand, bevel, decorate, wash or polish glass or glass products
- setting and operating press machines to mould ceramic articles from moist clay
- operating machines to mix clay with water to knead it into a suitable plastic condition or semi-liquid form for making ceramic products
- operating and monitoring kilns which bake pottery, porcelain ware and bake bricks and tiles
- operating and monitoring machines for making glaze or abrasives
- operating and monitoring machines which extrude molten glass to form fibreglass filaments
- observing finished products to identify splits, cracks, breaks, colour and other imperfections

This unit group includes:

- Ceramic kiln operator
- Glass annealing furnaceman
- Fibreglass maker
- Glass float bath operator
- Laminated glass worker

This unit group excludes:

- Plastic products machine operators (8142)

## 8182 **Steam Engine and Boiler Operators**

Steam engine and boiler operators maintain and operate various types of steam engines, boilers, turbines and auxiliary equipment to provide power and other utility services for commercial, industrial and institutional buildings, at work sites and aboard ships or self-propelled vessels.

Tasks include:

- operating, cleaning, lubricating and monitoring steam engines, boilers and auxiliary equipment such as pumps, compressors and air-conditioning equipment to supply and maintain steam and power for buildings, marine vessels or pneumatic tools
- analysing and recording instrument readings, troubleshooting and performing minor repairs to prevent equipment or system failure
- monitoring and inspecting performance of equipment for efficient operation and ensuring boiler water, chemical and fuel levels are maintained at required levels
- firing coal furnaces by hand or with stokers and gas or oil-fed boilers, using automatic gas feeds or oil pumps
- testing boiler water quality or arrange for testing, adjusting and taking necessary corrective action, such as adding chemicals to prevent corrosion and harmful deposits
- monitoring ship's engine, machinery and equipment indicators, recording variables and reporting abnormalities to ship engineer officer on watch
- operating and maintaining off-loading liquid pumps and valves

This unit group includes:

- Boiler attendant
- Ship's fireman
- Ship motorman
- Locomotive fireman

**8183 Packing, Bottling and Labelling Machine Operators**

Packing, bottling and labelling machine operators monitor and operate machines which weigh, pack and label various products or fill different containers with products.

Tasks include:

- operating and monitoring machines that weigh, wrap, seal and pack various products
- operating and monitoring machines that fill and seal tubes, bottles, cans, boxes, bags and other containers with products such as food, beverages, paints, oils and lotions
- operating and monitoring machines that, by gluing or other methods, label products, packages and various containers

This unit group includes:

- Goods marking machine operator
- Machine labeller
- Capping and sealing machine operator

This unit group excludes:

- Manufacturing labourers and related workers (9320)

**8184 Printing, Binding and Related Machine Operators**

Printing, binding and related machine operators monitor and operate various types of printing and copying machines which print and copy onto paper or machines which bind and emboss books.

Tasks include:

- operating and monitoring machines that print or photocopy onto paper
- operating and monitoring machines which bind and emboss books
- setting up and supervising the operation of automatic binding and finishing equipment
- binding full, half and limp-bound books and repairing bindings
- folding, collating and sewing signatures by machine
- operating paper guillotines for pre-press and post-press paper cutting and trimming and programming electronically operated units
- operating systems to insert printed materials into newspapers, magazines and envelopes
- embellishing printed products automatically
- operating photographic and electronic reproduction devices

This unit group includes:

- Braille duplicating machine operator
- Direct lithographic pressman
- Wallpaper printer
- Bookbinding machine operator
- Book embossing machine operator
- Stapling machine operator

This unit group excludes:

- Printers (7322)

**8185 Incineration Plant, Water Treatment and Related Machine Operators**

Incineration plant, water treatment and related machine operators monitor and operate various types of plant, such as incinerators, water-treatment plant, pumping stations, refrigeration or heating and ventilation systems.

Tasks include:

- operating and monitoring machinery and equipment which purify and clarify water for human consumption or use and later disposal into natural water systems
- operating and monitoring air and gas compressors
- operating and monitoring pumping stations for transferring liquids, gases, semi-liquids and powdered substances from one location to another
- operating and monitoring refrigeration systems for cool or cold storage, or industrial processes
- operating and monitoring heating and ventilation systems
- operating and monitoring incinerator machinery and equipment which burn garbage or other waste materials
- performing related task

This unit group includes:

- Air-compressor operator
- Pumphouse man
- Water pumpman
- Purifying plant operator (water works)
- Refrigeration system operator
- Waste incineration plant operator

**8186 Power Generating Plant Operators**

Power generating plant operators monitor, operate and maintain machinery and equipment which produce electric or other power and control its distribution.

Tasks include:

- operating and monitoring various types of energy generating power plants
- operating and controlling power generating systems and equipment that are used to generate and distribute electrical power
- taking readings from charts, meters and gauges at established intervals, troubleshooting and performing corrective action as necessary
- completing and maintaining station records, logs and reports and communicating with other plant personnel to assess equipment operating status
- cleaning and maintaining equipment in order to prevent equipment failure or deterioration

This unit group includes:

- Electricity generating switchboard operator
- Hydroelectric station operator
- Power generating plant operator
- Rectifier operator (electric current)

**8187 Petroleum and Natural Gas Refining Plant Operators**

Petroleum and natural gas refining plant operators operate and monitor plants which refine, distil and treat petroleum, petroleum-base products and by-products or natural gas.

Tasks include:

- operating and monitoring plant which removes sulphur from petroleum and petroleum-based products, and by-products
- operating and monitoring pumps which circulate petroleum products or water and chemical solutions through refinery
- operating and monitoring stills which distil or refine petroleum products
- operating and monitoring machines which blend petrol with chemicals and other additives
- operating and monitoring machines which refine or otherwise treat natural gases

This unit group includes:

- Paraffin plant operator
- Petroleum refining plant control man
- Acetylene filler
- Liquefied petroleum gas (LPG) filler
- Oxygen filler
- Asphalt blender
- Desulphurisation treater (petroleum refining)

**8188 Automated Assembly Line and Industrial Robot Operators**

Automated assembly line and industrial robot operators monitor and operate automated or semi-automated assembling lines or load and unload industrial robots and perform related tasks.

Tasks include:

- operating and monitoring automated or partially automated assembling lines
- operating and monitoring industrial robots

This unit group includes:

- Automated assembly line and industrial robot operator

**8189 Stationary Plant and Machine Operators Not Elsewhere Classified**

Stationary plant and machine operators not elsewhere classified include other operators not classified in Minor Group 818 “Other stationary plant and machine operators”.

Tasks include:

- operating and monitoring machines that fills containers with gases (except compressed or liquefied gas) or liquids
- operating and monitoring machines that bale press paper

This unit group includes:

- Bale press operator
- Rubber baling press operator

This unit group excludes:

- Packing, bottling and labelling machine operators (8183)

#### 8200 **Supervisors and General Foremen of Assemblers and Quality Checkers**

Assembly and quality check supervisors and general foremen supervise the production activities of a distinct unit within an establishment concerned with manufacturing and assembling of electrical and electronic equipment and components and control and coordinate the activities of workers.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- General foreman (electronic equipment manufacturing and repairing)
- Supervisor and general foreman (electrical equipment manufacturing and repairing)

#### 8212 **Electrical and Electronic Equipment Assemblers**

Electrical and electronic equipment assemblers assemble or modify, according to strictly laid down procedures, components of electrical, electro-mechanical and electronic equipment.

Tasks include:

- assembling component parts and electrical and electronic systems and positioning, aligning and fastening units to assemblies, sub-assemblies, or frames using hand or power tools, soldering and micro-welding equipment
- reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions
- recording production and operational data on specified forms
- operating wire-coiling machines to wind wire coils used in electrical equipment and components such as registers, transformers, armature wires, electric motors and generators

This unit group includes:

- Industrial machine assembler (electrical)
- Radio valve assembler
- Electrical component assembler
- Radio receiver assembler
- Battery assembler

This unit group excludes:

- Other machinery mechanics and repairers (7233)

### 8213 **Quality Checkers and Testers**

Quality checkers and testers inspect finished products or parts for compliance with manufacturer's standards.

Tasks include:

- checking and testing finished products or parts for accuracy of assembly
- checking and testing finished products for compliance with weight and other specifications
- checking and testing finished products for defects in finish or operation

This unit group includes:

- Electrical products checker and tester
- Electronic products checker and tester
- Mechanical products checker (quality assurance)
- Mechanical products quality checker

### 8219 **Assemblers Not Elsewhere Classified**

Assemblers not elsewhere classified assemble, according to strictly laid down procedures, various products that do not include electronic or electrical components.

Tasks include:

- assembling component parts and positioning, aligning and fastening units to assemblies, sub-assemblies or frames using power tools, soldering and micro-welding equipment
- reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions
- recording production and operational data on specified forms

This unit group includes:

- Doll and stuffed toy maker
- Toy assembler
- Metal products assembler
- Plastic products assembler
- Rubber goods assembler

This unit group excludes:

- Electrical and electronic equipment assemblers (8212)

**8300 Mobile Machinery Supervisors and General Foremen**

Mobile machinery supervisors and general foremen supervise activities of a distinct unit within an establishment concerned with the transport of passengers, material and goods and control the activities of workers in related occupations.

Tasks include:

- interpreting specifications and job orders
- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- coordinating the work of one or more units with other units
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

This unit group includes:

- Mobile machinery supervisor and general foreman

**8311 MRT Train Operators**

MRT train operators drive MRT trains to transport passengers.

Tasks include:

- driving MRT trains
- watching for track hazards, observing signals and indicator gauges
- operating communication systems to communicate with train crews and traffic controllers to ensure safe operation and scheduling of trains

This unit group includes:

- MRT train operator

This unit group excludes:

- Railway brakemen and related workers (8312)
- Tram driver (8331)

**8312 Railway Brakemen and Related Workers**

Railway brakemen, signallers and shunters take charge of and safeguard railway freight trains during runs, control the movement of railway traffic by operating signals, switch rolling stock and make up trains in railway yards or MRT depots.

Tasks include:

- taking charge of and safeguarding freight train during run
- controlling flow of railway traffic over section of line by operating signals and switches from control panel or signal box
- switching and coupling rolling stock in railway yards or MRT depots and sidings in accordance with orders about loading, unloading and make-up of trains
- making up trains for hauling by locomotive or cable and directing their movement along haulage ways



- checking train systems and equipment such as air conditioning and heating systems, brakes and brake hoses prior to train run

This unit group includes:

- Railway brakeman/signalman/shunter

#### 8321 **Motorcycle Delivery Men**

Motorcycle delivery men drive and tend motorcycles to transport materials and goods.

Tasks include:

- driving and tending motorcycle to transport materials and goods
- observing traffic rules and signals
- cleaning and washing vehicle as well as performing maintenance and minor repairs
- keeping a record of journeys
- delivering messages

This unit group includes:

- Motorcycle delivery man
- Motor-tricycle driver (goods)

#### 8322 **Car, Taxi and Van and Light Goods Vehicle Drivers**

Car, taxi and van drivers drive and tend motor cars and vans to transport passengers, mail or goods.

Tasks include:

- driving and tending passenger, ambulances, vans, cars or taxis
- driving and tending cars, vans or small trucks to deliver mail or goods
- assisting passengers with handling of luggage
- collecting fares, payments for deliveries, or documents certifying deliveries
- operating telecommunications equipment to report location and availability and follow directions of control centre
- determining most appropriate route
- assisting physically challenged passengers
- operating equipment to facilitate the loading and unloading of physically challenged passengers

This unit group includes:

- Ambulance driver
- Chauffeur
- Pick-up driver
- Taxi driver
- Van driver
- Parking valet

This unit group excludes:

- Bus and tram drivers (8331)

**8331 Bus and Tram Drivers**

Bus and tram drivers drive and tend buses or tramcars to transport passengers or goods.

Tasks include:

- driving and tending motor bus, trolley bus or motor coach to transport local or long-distance passengers or goods
- driving and tending tramcars transporting passengers
- opening and closing doors before or after passengers board or alight
- assisting passengers with luggage
- controlling lighting and ventilation on buses and trams
- observing traffic to ensure safe progress
- collecting fares or verifying passenger has necessary ticket

This unit group includes:

- Bus driver
- Tram driver

This unit group excludes:

- Car, taxi and van drivers (8322)

**8332 Heavy Truck and Lorry Drivers**

Heavy truck and lorry drivers drive and tend heavy motor vehicles to transport goods, liquids and heavy materials over short or long distances.

Tasks include:

- driving and tending a heavy motor vehicle, such as a lorry with or without trailer or a dump-truck, to transport goods, liquids or heavy materials over short or long distances
- determining the most appropriate routes
- ensuring goods are stowed and securely covered, to prevent loss and damage
- assisting with or carrying out loading or unloading operations, using various lifting or tipping devices
- carrying out minor maintenance to vehicles and arranges major maintenance and repairs
- estimating weights to comply with load limitations and ensuring the safe distribution of weights

This unit group includes:

- Container truck driver
- Fire engine driver
- Tanker driver
- Concrete mix truck driver
- Waste truck driver

This unit group excludes:

- Lifting truck operators (8344)

**8342 Earth Moving and Related Machinery Operators**

Earth moving and related machinery operators operate machines to excavate, grade, level, smooth and compact earth or similar materials.

Tasks include:

- operating and monitoring excavating machinery equipped with movable shovel, grab-bucket or dragline bucket to excavate and move earth, rock, sand, gravel or similar materials
- operating and monitoring machinery for digging trenches for sewers, drainage, water, oil, gas or similar pipelines
- operating and monitoring machinery equipped with concave steel blade to move, distribute and level earth, sand and other similar materials
- operating and monitoring equipment to remove sand, gravel and mud from bottom of body of water
- operating and monitoring machines for hammering wooden, concrete or steel piles into ground
- operating and monitoring power roller to compact and smooth layers of materials in making roads, pavements and similar work
- operating and monitoring machines which spread and smooth concrete or bituminous or tar preparations to construct roadways, roads or similar surfaces

This unit group includes:

- Trench digging machine operator
- Drilling machine operator
- Asphalt spreading machine operator
- Pneumatic-drill operator

**8343 Crane, Hoist and Related Equipment Operators**

Crane, hoist and related equipment operators monitor and operate stationary and mobile cranes and other hoisting equipment.

Tasks include:

- operating and monitoring stationary or mobile cranes by raising and lowering jibs and booms, to lift, move, position or place equipment and materials
- operating and monitoring equipment for hoisting, lowering or raising workers and materials on construction sites
- operating and monitoring machinery used to haul ferry or barge with goods, passengers and vehicles across short stretches of water
- operating and monitoring cranes equipped with dredging attachments to dredge waterways and other areas
- operating and monitoring cranes mounted on boats or barges to lift, move and place equipment and materials

This unit group includes:

- Floating crane operator
- Locomotive crane operator
- Winch operator
- Aerial ropeway operator
- Cable car operator
- Scoop-truck operator

**8344 Lifting Truck Operators**

Lifting truck operators drive, operate and monitor lifting-truck or similar vehicle to transport, lift and stack pallets with goods.

Tasks include:

- operating and monitoring lifting truck and similar equipment to load and unload, transport, lift and stack goods and pallets in terminals, harbours, ware-houses, factories and other establishments
- positioning lifting devices under, over or around loaded pallets, skids and boxes and securing material or products for transport to designated areas
- inspecting equipment to identify wear and damage
- performing routine maintenance on vehicles and equipment
- keeping records of work undertaken and breakdown of lifting truck and similar equipment

This unit group includes:

- Fork lift truck operator
- Industrial truck operator
- Lifting truck operator

**8349 Mobile Machinery Operators Not Elsewhere Classified**

Mobile machinery operators not elsewhere classified drive, operate and monitor mobile machinery for agriculture, sweeping and farming.

Tasks include:

- operating and monitoring mobile machinery to sweep the roads
- operating and monitoring machinery for agriculture or milking animals

This unit group includes:

- Motorised sweeper driver
- Agricultural mobile machinery operator
- Pedestrian tractor operator
- Threshing machine operator
- Telescopic handler operator

**8350 Ships' Deck Crew and Related Workers**

Ships' deck crew and related workers carry out deck duties on board ship and similar duties on board other water-borne craft.

Tasks include:

- standing look-out watches at sea and when entering or leaving harbour or other narrow waters
- steering ship according to instructions
- handling ropes and wires and operates mooring equipment
- maintaining and in some cases, operating ship's equipment, cargo gear, rigging, life-saving and fire-fighting appliances
- performing deck and hull cleaning, scraping, painting and other maintenance duties as required
- breaking out, rigging and stowing cargo-handling gear, stationary rigging and running gear

This unit group includes:

- Coxswain
- Helmsman
- Kemudi
- Boatswain
- Lighterman
- Taikong
- Bargeman
- Serang
- Lightshipman

**9100 Cleaning Supervisors**

Cleaning supervisors supervise the activities of a unit performing various cleaning tasks in private households, hotels, offices, hospitals and other establishments, as well as in aircrafts, trains, coaches, trams and similar vehicles, in order to keep the interiors and fixtures clean.

Tasks include:

- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

**9112 Cleaners and Helpers in Hotels and Related Establishments**

Cleaners and helpers in hotels and related establishments perform various cleaning tasks in order to keep clean and tidy the interiors and fixtures of hotels and related establishments.

Tasks include:

- sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures in buildings
- making beds, cleaning bathrooms, supplying towels, soap and related items
- picking up rubbish, emptying garbage containers and taking contents to waste areas for removal

This unit group includes:

- Chambermaid
- Hotel cleaner

This unit group excludes:

- Officer cleaner (9113)
- Kitchen assistant (9410)
- Dishwasher (9115)

**9113 Cleaners in Offices**

Cleaners and helpers in offices perform various cleaning tasks in order to keep clean and tidy the interiors and fixtures of offices.

Tasks include:

- sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures in buildings
- cleaning pantries
- picking up rubbish, emptying garbage containers and taking contents to waste areas for removal

This unit group includes:

- Office cleaner

This unit group excludes:

- Window cleaner (9123)
- Kitchen assistant (9410)
- Dishwasher (9115)
- Building caretaker (9626)

#### 9114 **Cleaners in Industrial Establishments**

Cleaners in industrial establishments (e.g. factories, industrial plants) make use of specialised equipment and solvents to perform various cleaning tasks in industrial premises.

This unit group includes:

- Factory cleaner

This unit group excludes:

- Window cleaner (9123)
- Office cleaner (9113)
- Building caretaker (9626)

#### 9115 **Cleaners in Food and Beverage Establishments**

Cleaners in food and beverage establishments perform various cleaning tasks in order to keep clean and tidy the premises of food and beverage establishments.

Tasks include:

- sweeping and cleaning floors
- collecting plates and utensils and cleaning tables
- washing plates, trays and utensils
- cleaning kitchens
- picking up rubbish, emptying garbage containers and taking contents to waste areas for removal

This unit group includes:

- Cleaner in food court
- Cleaner in hawker centre
- Cleaner in restaurant
- Dishwasher
- Plate collector
- Table-top cleaner

This unit group excludes:

- Cleaner in industrial establishment (9114)
- Kitchen assistant (9410)

**9116 Cleaners in Residential Areas**

Cleaners in residential areas perform various cleaning tasks in order to keep clean and tidy the premises of residential areas.

Tasks include:

- sweeping and cleaning of staircases, common corridors, walkways, lifts/lift lobbies letterbox areas, car parks and void decks
- sweeping and cleaning of shared facilities like function rooms, resident's corner, pavilions, bin centres, playgrounds, fitness centres etc
- clearing of trash bins

This unit group includes:

- Cleaner in HDB estate
- Cleaner in private housing estate

This unit group excludes:

- Cleaner in open areas (9117)

**9117 Cleaners in Open Areas**

Cleaners in open areas perform various cleaning tasks in order to keep clean and tidy common public open areas such as roads, pavements, bus stops, drains, waterways, overhead bridges, expressways, parks, beaches etc.

Tasks include:

- cleaning of drains and waterways
- sweeping of car parks, bus stops, overhead bridges, underpasses, footpaths, etc
- cleaning rubbish, leaves on driveways and grounds

This unit group includes:

- Beach cleaner
- Park cleaner
- Waterways cleaner

This unit group excludes:

- Cleaner in residential areas (9116)

**9119 Cleaners in Other Establishments**

Cleaners in residential areas perform various cleaning tasks in order to keep clean and tidy the premises of other areas not covered by unit groups 9112 to 9117 e.g. places of worship, hospitals, schools, shopping malls etc.

**9121 Hand Launderers and Pressers**

Hand launderers and pressers launder, press or dry-clean garments, linen and other textiles by hand.

Tasks include:

- laundering and pressing linen, clothing, fabrics and similar articles by hand in a laundry or other establishment



- cleaning, by hand and with chemical solutions, clothing, fabrics, leather goods and similar articles, in a dry-cleaning or other establishment
- replacing buttons and making minor repairs
- placing articles on shelves and hanging articles for delivery and collection

This unit group includes:

- Ironer (laundry service)
- Washer (laundry service)

This unit group excludes:

- Laundry press machine operator (8159)

### 9122 **Vehicle Cleaners**

Vehicle cleaners wash, clean and polish motor vehicles such as cars and taxis.

Tasks include:

- cleaning, washing and polishing cars and other vehicles, by hand or using hand-held power tools
- vacuuming vehicle interiors and dry cleaning carpets and upholstery
- applying cleaning agents to remove stains from vehicle exteriors and interiors
- washing tyres and wheel arches and blackening tyres
- washing and polishing vehicle windows
- emptying and cleaning compartments in vehicles

This unit group includes:

- Car cleaner
- Car polisher

This unit group excludes:

- Ship and tank cleaner (9129)
- Railway carriage cleaner (9129)

### 9123 **Window Cleaners**

Window cleaners wash and polish windows and other glass fittings.

Tasks include:

- washing windows or other glass surfaces with water or various solutions, drying and polishing them
- using ladders, swinging scaffolds, bosun's chairs, hydraulic bucket trucks and other equipment to reach and clean windows in multi-storey buildings
- selecting appropriate cleaning or polishing implements

### 9129 **Cleaning Workers Not Elsewhere Classified**

This group includes other cleaning workers who clean surface, materials and objects, such as walls, swimming pools and non-motor vehicles like ships and aircraft, using specialised cleaning equipment and chemicals.

Tasks include:

- cleaning carpets and upholstered furniture using cleaning machines and their attachments
- selecting and applying cleaning agents to remove stains from carpets, furniture and walls
- cleaning stone walls, metal surfaces and fascias using high pressure water cleaners and solvents
- applying chemicals and high pressure cleaning methods to remove micro-organisms from water and filtration systems and using wet vacuums and other suction equipment to remove scale, accumulated dirt and other deposits from swimming pools, cooling tower components and drains

This unit group includes:

- Ship and tank cleaner
- Railway carriage cleaner

This unit group excludes:

- Car cleaner (9122)

#### 9130 **Domestic Helpers and Cleaners**

Domestic helpers and cleaners sweep, vacuum-clean, wash and polish, take care of household linen, purchase household supplies, prepare food, serve meals and perform various other domestic duties.

Tasks include:

- sweeping, vacuum-cleaning, polishing and washing floors and furniture, or washing windows and other fixtures
- washing, ironing and mending linen and other textiles
- washing dishes
- helping with preparation, cooking and serving of meals and refreshments
- purchasing food and various other household supplies
- cleaning, disinfecting and deodorising kitchens, bathrooms and toilets
- cleaning windows and other glass surfaces

This unit group includes:

- Domestic worker
- Amah (general)

This unit group excludes:

- Chambermaid (9112)
- Office cleaner (9113)

#### 9214 **Park and Garden Maintenance Workers**

Park and garden maintenance workers perform simple and routine tasks in operations to cultivate and maintain trees, shrubs, flowers and other plants in parks and private gardens to produce saplings, bulbs and seeds, or grow vegetables and flowers by intensive cultivation techniques.

Tasks include:

- loading, unloading and moving supplies, produce and equipment
- preparing garden sites and plots using hand tools and simple machines
- assisting with planting and transplanting flowers, shrubs, trees and lawns
- maintaining gardens by watering, weeding and mowing lawns
- cleaning gardens and removing rubbish
- assisting with propagating, planting and potting seeds, bulbs and cuttings
- tending plants by hand watering and weeding
- harvesting and packaging plants for sale and transport
- performing minor repairs on fixtures, buildings and fences

This unit group includes:

- Gardening labourer
- Tree cutter
- Turf layer

This unit group excludes:

- Farm labourer (9219)

#### 9219 **Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified**

This unit group covers agricultural and related workers performing simple and routine farming and fishing tasks that are outside the scope of those classified in Unit Group 9214 'Park and Garden Maintenance Workers'.

Tasks include:

- digging, shovelling, loading, unloading, stacking, raking, pitching
- spreading manure or fertilisers
- watering and weeding
- grass cutting and tree pruning
- picking fruits, vegetables and various plants
- feeding animals and cleaning animal quarters
- cleaning undergrowth in forest stands
- clearing sea-bed and performing other simple tasks connected with aquatic cultivation

This unit group includes:

- Farm labourer

#### 9310 **Civil Engineering and Building Construction Labourers**

Civil engineering and building construction labourers perform routine tasks in connection with demolition works as well as the construction of buildings and civil engineering projects such as roads, railways and dams.

Tasks include:

- digging and filling holes and trenches using hand-held tools
- shovelling and spreading gravel and related materials
- trimming and cutting rocks and concrete and bitumen surfaces using jack-hammers

- loading and unloading construction materials, excavated material and equipment and transporting them around construction sites using wheelbarrows and hand trucks
- cleaning worksites and removing obstructions
- cleaning used building bricks and doing other simple work on demolition sites
- mixing, pouring and spreading materials such as concrete, plaster and mortar trucks
- cleaning work sites and removing obstructions

This unit group includes:

- Tent erector
- Ditch digger
- Labourer (construction)

### 9320 **Manufacturing Labourers and Related Workers**

Manufacturing labourers not elsewhere classified assist the work of machine operators and assemblers and perform a variety of manual tasks in manufacturing, including packing and labelling finished products.

Tasks include:

- weighing, wrapping, sealing and packing material and various products by hand filling bottles, cans, boxes, bags and other containers with products by hand
- labelling products, packages and various containers by hand
- conveying goods, material, equipment etc to work area, removing finished pieces
- loading and unloading vehicles, trucks and trolleys
- clearing machine blockages, cleaning machinery, equipment and tools
- carrying out manual sorting of products or components

This unit group includes:

- Hand wrapper
- Labourer (manufacturing)
- Sheet rubber maker

### 9331 **Hand and Pedal Vehicle Drivers**

Hand or pedal vehicle drivers propel cycles and similar vehicles to transport passengers or goods.

Tasks include:

- loading or unloading goods, or assisting passengers in getting on or off a vehicle
- moving vehicle in the desired direction with due regard to other traffic and traffic regulations
- inspecting vehicle components to identify wear and damage
- maintaining vehicle, making minor repairs and installing replacement parts
- collecting fares or charges

This unit group includes:

- Trishaw man
- Pedal vehicle driver

**9333 Material and Freight Handling Workers**

Material and freight handlers carry out tasks such as packing, carrying, loading and unloading furniture and other household items, or loading and unloading ship and aircraft cargoes and other freight, or carrying and stacking goods in various warehouses.

Tasks include:

- packing office or household furniture, machines, appliances and related goods to be transported from one place to another
- carrying goods to be loaded on or unloaded from vans, trucks, wagons, ships, or aircraft
- loading and unloading grain, coal, sand and similar goods by placing them on conveyor-belts, pipes etc
- connecting hoses between main shore installation pipes and tanks of barges, tankers and other ships to load and unload petroleum, liquefied gases and other liquids
- carrying and stacking goods in warehouses and similar establishments
- sorting cargo prior to loading and unloading

This unit group includes:

- Ship loader
- Lorry loader
- Furniture mover
- Baggage handler
- Cargo handler

**9410 Food Preparation and Kitchen Assistants**

Food preparation and kitchen assistants clean kitchen areas, wash dishes, preparing ingredients and perform other duties to assist workers who prepare or serve food and beverages.

Tasks include:

- cleaning kitchens, food preparation areas and service areas
- assisting cooks and chefs in preparation of food by washing, peeling, chopping, cutting up, measuring and mixing ingredients
- assembling dishes for service
- unpacking and storing supplies in refrigerators, cupboards and other storage areas
- washing dishes and cooking utensils and putting them away
- checking, transferring, weighing and storing supplies in refrigerators, cupboards and other storage areas
- preparing, cooking, toasting and heating simple food items

This unit group includes:

- Kitchen assistant
- Fast food preparer

This unit group excludes:

- Cook (5120)
- Plate collector (9115)

**9600 Waste and Recyclables Collection Supervisors**

Waste and recyclable collection supervisors supervise the activities of a unit performing various general waste and recyclables collection tasks. They may also undertake similar tasks as those performed by the waste and recyclables collection workers.

Tasks include:

- determining sequence of operations and use of equipment
- estimating manpower requirements
- assigning duties to workers
- analysing and resolving work problems
- recommending or initiating personnel action
- supervising co-workers and helping them in their work

**9611 Waste and Recyclables Collection Workers**

Waste and recyclables collection workers identify, collect and sort recyclables and discarded items for recycling and disposal.

Tasks include:

- collecting general waste and recyclables from bins and loading into collection vehicles
- mechanical lifting of waste and recycling bins and emptying contents from bins into trucks
- identifying and setting aside items of furniture, equipment, machinery, or components that are suitable for repair, re-use or recycling
- processing of recyclables in a material recovery process chain
- collecting greasy waste from grease interceptors and mobile toilets via tankers

This unit group includes:

- General waste and recyclables collection worker
- Recyclables sorter
- Greasy waste collection worker

This unit group excludes:

- Cleaner in open areas (9117)

**9621 Porters and Related Workers**

Porters and related workers carry and deliver messages, packages and other items within an establishment or between establishments, to households and elsewhere, or carry luggage especially at hotels, stations and airports.

Tasks include:

- delivering messages, packages and other items within an establishment or between establishments, or elsewhere
- performing the duties of a post-runner

- delivering various goods to and from enterprises, shops, households and other places
- carrying and delivering luggage at hotels, stations, airports, and elsewhere
- receiving and marking baggage by completing and attaching claim checks
- planning and following the most efficient route
- sorting items to be delivered according to the delivery route

This unit group includes:

- Bell captain
- Bellboy
- Porter railway

#### 9625 **Attendants**

Attendants look after and maintain parking places and health and sanitary places. They may also perform other general duties such as issuing and collecting parking or admission tickets, collecting fees and delivering supplies and equipment.

Tasks include:

- recording or checking parking time and collecting parking fees
- directing vehicle drivers to parking spaces
- patrolling parking areas in order to prevent vehicle damage and vehicle property thefts
- delivering laboratory supplies, equipment or specimens to designated work areas and cleaning laboratory equipment
- moving patients to treatment units and distributing dressing packs, treatment trays and other supplies

This unit group includes:

- Library attendant
- Hospital attendant
- Car park attendant
- Sports and recreation attendant
- Bus attendant
- Restroom attendant

This unit group excludes

- Building caretaker (9626)

#### 9626 **Watchmen and Related Workers**

Watchmen and related workers take care of apartment houses, hotels, offices, churches and other buildings and maintain them and associated grounds in a clean and orderly condition.

Tasks include:

- participating in cleaning, simple repairs and maintenance of building interiors
- regulating conduct of tenants and visitors in matters such as noise abatement or misuse of property
- providing small services to absent tenants such as accepting deliveries on their behalf or providing requested information to callers

- notifying management and owners of buildings of the need for major repairs
- patrolling buildings to ensure security is maintained
- filling out registration forms and providing tenants with copies of rules

This unit group includes:

- Building caretaker
- Doorman
- Lighthouse keeper

#### 9629 **Other Elementary Workers**

This unit group covers elementary workers not classified elsewhere in Major Group 9 'Cleaners, labourers and related workers'. For instance, this group includes those that distribute leaflets and newspapers to households and at designated locations, meter readers and grave diggers.

Tasks include:

- handing out leaflets and free newspapers at designated locations
- distributing newspapers to households
- receiving immediate payment or collecting money from vending machines, parking meters or similar coin-boxes
- reading electricity, gas or water meters and recording consumption
- verifying readings in cases where consumption appears to be abnormal, and record possible reasons for fluctuations
- inspecting meters for unauthorised connections, defects, and damage such as broken seals

This unit group includes:

- Leaflet and newspaper distributor
- Meter reader
- Grave digger



Appendix:  
Comparison Between  
SSOC 2015 and SSOC 2010

**1 LEGISLATORS, SENIOR OFFICIALS AND MANAGERS**

**1 LEGISLATORS, SENIOR OFFICIALS AND MANAGERS**

<b>SSOC 2015</b>		<b>SSOC 2010</b>	
<b>11</b>	<b>LEGISLATORS, SENIOR OFFICIALS AND AND CHIEF EXECUTIVES</b>	<b>11</b>	<b>LEGISLATORS, SENIOR OFFICIALS AND AND CHIEF EXECUTIVES</b>
111	LEGISLATORS AND SENIOR OFFICIALS	111	LEGISLATORS AND SENIOR OFFICIALS
1111	Legislators	1111	Legislators
1112	Senior Government and Statutory Board Officials	1112	Senior Government and Statutory Board Officials
1114	Senior Officials of Political Party Organisations	1114	Senior Officials of Political Party Organisations
1115	Senior Officials Of Employers', Workers' and Other Economic-Interest Organisations	1115	Senior Officials Of Employers', Workers' and Other Economic-Interest Organisations
1116	Senior Officials of Humanitarian and Other Special-Interest Organisations	1116	Senior Officials of Humanitarian and Other Special-Interest Organisations
112	MANAGING DIRECTORS, CHIEF EXECUTIVES AND GENERAL MANAGERS	112	MANAGING DIRECTORS, CHIEF EXECUTIVES AND GENERAL MANAGERS
1120	Managing Directors, Chief Executives and General Managers	1120	Managing Directors, Chief Executives and General Managers
<b>12</b>	<b>ADMINISTRATIVE AND COMMERCIAL MANAGERS</b>	<b>12</b>	<b>ADMINISTRATIVE AND COMMERCIAL MANAGERS</b>
121	BUSINESS SERVICES AND ADMINISTRATION MANAGERS	121	BUSINESS SERVICES AND ADMINISTRATION MANAGERS
1211	Finance and Administration Managers	1211	Finance and Administration Managers
1212	Human Resource Managers	1212	Human Resource Managers
1213	Policy and Planning Managers	1213	Policy and Planning Managers
1219	Business Services and Administration Managers Not Elsewhere Classified	1219	Business Services and Administration Managers Not Elsewhere Classified

SSOC 2015		SSOC 2010	
122	SALES, MARKETING, DEVELOPMENT AND CUSTOMER SERVICE MANAGERS	122	SALES, MARKETING, DEVELOPMENT AND CUSTOMER SERVICE MANAGERS
1221	Sales, Marketing and Business Development Managers	1221	Sales, Marketing and Business Development Managers
1222	Advertising and Public Relations Managers	1222	Advertising and Public Relations Managers
1223	Research and Development Managers	1223	Research and Development Managers
1224	Customer Service and Call Centre Managers	1224	Customer Service and Call Centre Managers
<b>13</b>	<b>PRODUCTION AND SPECIALISED SERVICES MANAGERS</b>	<b>13</b>	<b>PRODUCTION AND SPECIALISED SERVICES MANAGERS</b>
131	PRODUCTION MANAGERS IN AGRICULTURE AND FISHERIES	131	PRODUCTION MANAGERS IN AGRICULTURE AND FISHERIES
1310	Production Managers in Agriculture and Fisheries	1310	Production Managers in Agriculture and Fisheries
132	MANUFACTURING, CONSTRUCTION, TRANSPORT, DISTRIBUTION AND OTHER PRODUCTION AND OPERATIONS MANAGERS	132	MANUFACTURING, CONSTRUCTION, TRANSPORT, DISTRIBUTION AND OTHER PRODUCTION AND OPERATIONS MANAGERS
1321	Manufacturing Managers	1321	Manufacturing Managers
1323	Construction Managers	1323	Construction Managers
1324	Transport, Supply, Distribution and Related Managers	1324	Transport, Supply, Distribution and Related Managers
1329	Production and Operations Managers Not Elsewhere Classified	1329	Production and Operations Managers Not Elsewhere Classified
133	INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICE MANAGERS	133	INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICE MANAGERS
1330	Information and Communications Technology Service Managers	1330	Information and Communications Technology Service Managers
134	PROFESSIONAL, FINANCIAL, COMMUNITY AND SOCIAL SERVICES MANAGERS	134	PROFESSIONAL, FINANCIAL, COMMUNITY AND SOCIAL SERVICES MANAGERS
1341	Child Care Services Managers	1341	Child Care Services Managers
1342	Health Services Managers	1342	Health Services Managers

SSOC 2015		SSOC 2010	
1343	Aged Care Services Managers	1343	Aged Care Services Managers
1344	Social Welfare Managers	1344	Social Welfare Managers
1345	Education and Training Institution Managers	1345	Education Managers
1346	Financial and Insurance Services Managers	1346	Financial and Insurance Services Managers
1349	Professional, Financial, Community and Social Services Managers Not Elsewhere Classified	1349	Professional, Financial, Community and Social Services Managers Not Elsewhere Classified
<b>14</b>	<b>HOSPITALITY, RETAIL AND RELATED SERVICES MANAGERS</b>	<b>14</b>	<b>HOSPITALITY, RETAIL AND RELATED SERVICES MANAGERS</b>
141	HOTEL AND FOOD AND BEVERAGES SERVICES MANAGERS	141	HOTEL AND FOOD AND BEVERAGES SERVICES MANAGERS
1411	Hotel Operations and Lodging Services Managers	1411	Hotel Operations and Lodging Services Managers
1412	Food and Beverages Services Managers	1412	Food and Beverages Services Managers
142	RETAIL AND WHOLESALE TRADE MANAGERS	142	RETAIL AND WHOLESALE TRADE MANAGERS
1420	Retail and Wholesale Trade Managers	1420	Retail and Wholesale Trade Managers
143	OTHER SERVICES MANAGERS	143	OTHER SERVICES MANAGERS
1431	Sports Centre Managers	1431	Sports Centre Managers
1432	Recreation Centre Managers	1432	Recreation Centre Managers
1433	Arts and Cultural Centre Managers	1433	Arts and Cultural Centre Managers
1439	Other Services Managers Not Elsewhere Classified	1439	Other Services Managers Not Elsewhere Classified

**2 PROFESSIONALS**

**2 PROFESSIONALS**

SSOC 2015			SSOC 2010		
21	SCIENCE AND ENGINEERING PROFESSIONALS		21	SCIENCE AND ENGINEERING PROFESSIONALS	
211	PHYSICAL AND EARTH SCIENCE PROFESSIONALS		211	PHYSICAL AND EARTH SCIENCE PROFESSIONALS	
	2111	Physicists and Astronomers		2111	Physicists and Astronomers
	2112	Meteorologists		2112	Meteorologists
	2113	Chemists		2113	Chemists
	2114	Geologists, Geophysicists and Other Physical Science Professionals		2114	Geologists, Geophysicists and Other Physical Science Professionals
212	MATHEMATICIANS, ACTUARIES, STATISTICIANS AND OTHER RELATED PROFESSIONALS		212	MATHEMATICIANS, ACTUARIES AND STATISTICIANS	
	2121	Mathematicians, Operations Research Analysts and Actuaries		2121	Mathematicians, Operations Research Analysts and Actuaries
	2122	Statisticians		2122	Statisticians
	2123	Other Statistical, Mathematical and Actuarial Professionals			
213	LIFE SCIENCE PROFESSIONALS		213	LIFE SCIENCE PROFESSIONALS	
	2131	Biologists, Botanists, Zoologists and Related Professionals		2131	Biologists, Botanists, Zoologists and Related Professionals
	2132	Farming, Forestry and Fishery Advisers		2132	Farming, Forestry and Fishery Advisers
	2133	Environmental Protection and Related Professionals		2133	Environmental Protection and Related Professionals
	2134	Pharmacologists and Related Professionals		2134	Pharmacologists and Related Professionals
214	ENGINEERING PROFESSIONALS (EXCLUDING ELECTROTECHNOLOGY)		214	ENGINEERING PROFESSIONALS (EXCLUDING ELECTROTECHNOLOGY)	
	2141	Industrial and Production Engineers		2141	Industrial and Production Engineers
	2142	Civil Engineers		2142	Civil Engineers
	2143	Environmental Engineers		2143	Environmental Engineers
	2144	Mechanical Engineers		2144	Mechanical Engineers
	2145	Chemical Engineers		2145	Chemical Engineers
	2146	Mining Engineers, Metallurgists and Related Professionals		2146	Mining Engineers, Metallurgists and Related Professionals
	2149	Engineering Professionals Not Elsewhere Classified		2149	Engineering Professionals Not Elsewhere Classified

SSOC 2015			SSOC 2010		
215		ELECTROTECHNOLOGY ENGINEERS	215		ELECTROTECHNOLOGY ENGINEERS
	2151	Electrical Engineers		2151	Electrical Engineers
	2152	Electronics Engineers		2152	Electronics Engineers
	2153	Telecommunications Engineers		2153	Telecommunications Engineers
216		ARCHITECTS, PLANNERS, SURVEYORS AND DESIGNERS	216		ARCHITECTS, PLANNERS AND SURVEYORS
	2161	Building Architects		2161	Building Architects
	2162	Landscape Architects		2162	Landscape Architects
	2163	Fashion, Garment and Product Designers		2164	Town and Related Planners
	2164	Town and Related Planners		2165	Surveyors and Cartographers
	2165	Surveyors and Cartographers			
	2166	Graphic and Multimedia Designers and Artists			
217		SHIP AND AIRCRAFT RELATED PROFESSIONALS			
	2171	Ship Engineers and Related Professionals			
	2172	Aircraft Pilots and Related Professionals			
<b>22</b>		<b>HEALTH PROFESSIONALS</b>	<b>22</b>		<b>HEALTH PROFESSIONALS</b>
221		MEDICAL DOCTORS	221		MEDICAL DOCTORS
	2211	Generalist Medical Practitioners		2211	Generalist Medical Practitioners
	2212	Specialist Medical Practitioners (Medical)		2212	Specialist Medical Practitioners (Medical)
	2213	Specialist Medical Practitioners (Surgical)		2213	Specialist Medical Practitioners (Surgical)
	2214	Specialist Medical Practitioners (Other Specialisations) - I		2214	Specialist Medical Practitioners (Other Specialisations)
	2215	Specialist Medical Practitioners (Other Specialisations) - II (Con'td)			
222		NURSING PROFESSIONALS			
	2220	Nursing Professionals			
223		TRADITIONAL AND COMPLEMENTARY MEDICINE PROFESSIONALS	223		TRADITIONAL AND COMPLEMENTARY MEDICINE PROFESSIONALS
	2230	Traditional and Complementary Medicine Professionals		2230	Traditional and Complementary Medicine Professionals
225		VETERINARIANS	225		VETERINARIANS
	2250	Veterinarians		2250	Veterinarians

SSOC 2015			SSOC 2010		
226		OTHER HEALTH PROFESSIONALS	226		OTHER HEALTH PROFESSIONALS
	2261	Dentists		2261	Dentists
	2262	Pharmacists		2262	Pharmacists
	2263	Environmental and Occupational Health and Hygiene Professionals		2263	Environmental and Occupational Health and Hygiene Professionals
	2264	Physiotherapists and Related Professionals		2269	Other Health Professionals Not Elsewhere Classified
	2265	Dietitians and Nutritionists			
	2266	Audiologists and Speech Therapists			
	2267	Optometrists			
	2268	Occupational Therapists			
	2269	Other Health Professionals Not Elsewhere Classified			
<b>23</b>		<b>TEACHING AND TRAINING PROFESSIONALS</b>	<b>23</b>		<b>TEACHING PROFESSIONALS</b>
231		UNIVERSITY, POLYTECHNIC AND HIGHER EDUCATION TEACHERS	231		UNIVERSITY, POLYTECHNIC AND HIGHER EDUCATION TEACHERS
	2310	University, Polytechnic and Higher Education Teachers		2310	University, Polytechnic and Higher Education Teachers
232		JUNIOR COLLEGE AND PRE-UNIVERSITY EDUCATION TEACHERS			
	2320	Junior College and Pre-university Education Teachers			
233		VOCATIONAL EDUCATION TEACHERS AND TRAINERS	232		VOCATIONAL EDUCATION TEACHERS
	2330	Vocational Education Teachers and Trainers		2320	Vocational Education Teachers
234		SECONDARY EDUCATION TEACHERS	233		SECONDARY EDUCATION TEACHERS
	2340	Secondary Education Teachers		2330	Secondary Education Teachers
235		PRIMARY EDUCATION TEACHERS	234		PRIMARY EDUCATION TEACHERS
	2350	Primary School Teachers		2340	Primary School Teachers
236		OTHER TEACHING PROFESSIONALS	235		OTHER TEACHING PROFESSIONALS
	2361	Education Methods Specialists		2351	Education Methods Specialists
	2362	Special Education Teachers		2352	Special Education Teachers
	2369	Other Teaching Professionals Not Elsewhere Classified		2359	Other Teaching Professionals Not Elsewhere Classified

SSOC 2015			SSOC 2010		
<b>24</b>	<b>BUSINESS AND ADMINISTRATION PROFESSIONALS</b>		<b>24</b>	<b>BUSINESS AND ADMINISTRATION PROFESSIONALS</b>	
241	FINANCE PROFESSIONALS		241	FINANCE PROFESSIONALS	
	2411 Accountants			2411 Accountants	
	2412 Financial and Investment Advisers			2412 Financial and Investment Advisers	
	2413 Financial Analysts and Related Professionals			2413 Financial Analysts and Related Professionals	
	2414 Securities and Finance Dealers and Brokers				
	2415 Insurance Underwriters				
242	ADMINISTRATION PROFESSIONALS		242	ADMINISTRATION PROFESSIONALS	
	2421 Management and Business Consultants			2421 Management and Business Consultants	
	2422 Policy Administration Professionals			2422 Policy Administration Professionals	
	2423 Human Resource Professionals			2423 Human Resource Professionals	
	2429 Other Administration Professionals Not Elsewhere Classified				
243	MARKETING AND PUBLIC RELATIONS PROFESSIONALS		243	MARKETING AND PUBLIC RELATIONS PROFESSIONALS	
	2431 Advertising and Marketing Professionals			2431 Advertising and Marketing Professionals	
	2432 Public Relations Professionals			2432 Public Relations Professionals	
	2433 Specialised Goods Sales Professionals				
	2434 Trade and Ship Brokers				
<b>25</b>	<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY PROFESSIONALS</b>		<b>25</b>	<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY PROFESSIONALS</b>	
251	SOFTWARE AND APPLICATIONS DEVELOPERS AND ANALYSTS		251	SOFTWARE AND APPLICATIONS DEVELOPERS AND ANALYSTS	
	2511 Systems Analysts			2511 Systems Analysts	
	2512 Software, Web and Multimedia Developers			2512 Software, Web and Multimedia Developers	
	2514 Applications and Systems Programmers			2514 Applications and Systems Programmers	
	2515 Information Technology Testing and Quality Assurance Professionals			2515 Information Technology Testing and Quality Assurance Professionals	
	2516 Information Technology Project Managers			2516 Information Technology Project Managers	
	2519 Software and Applications Developers and Analysts Not Elsewhere Classified			2519 Software and Applications Developers and Analysts Not Elsewhere Classified	



SSOC 2015			SSOC 2010		
252		DATABASE NETWORK AND INFRASTRUCTURE PROFESSIONALS	252		DATABASE AND NETWORK PROFESSIONALS
	2521	Database Designers and Administrators		2521	Database Designers and Administrators
	2522	Network, Servers and Computer Systems Administrators		2522	Network and Computer Systems Administrators
	2523	Computer Network and Infrastructure Professionals		2523	Computer Network Professionals
	2524	Information Technology Security Specialists		2524	Information Technology Security Specialists
	2529	Database and Network Professionals Not Elsewhere Classified		2529	Database and Network Professionals Not Elsewhere Classified
<b>26</b>		<b>LEGAL, SOCIAL AND CULTURAL PROFESSIONALS</b>	<b>26</b>		<b>LEGAL, SOCIAL AND CULTURAL PROFESSIONALS</b>
261		LEGAL PROFESSIONALS	261		LEGAL PROFESSIONALS
	2611	Lawyers		2611	Lawyers
	2612	Judges		2612	Judges
262		LIBRARIANS, ARCHIVISTS AND CURATORS	262		LIBRARIANS, ARCHIVISTS AND CURATORS
	2621	Archivists, Curators and Conservators		2621	Archivists, Curators and Conservators
	2622	Librarians and Related Information Professionals		2622	Librarians and Related Information Professionals
263		SOCIAL SCIENCE PROFESSIONALS	263		SOCIAL SCIENCE PROFESSIONALS
	2631	Economists		2631	Economists
	2632	Sociologists, Anthropologists and Related Professionals		2632	Sociologists, Anthropologists and Related Professionals
	2633	Historians, Political Scientists and Other Social Science Professionals		2633	Historians, Political Scientists and Other Social Science Professionals
	2634	Psychologists		2634	Psychologists
	2635	Social Work and Counselling Professionals		2635	Social Work and Counselling Professionals

SSOC 2015			SSOC 2010		
264		AUTHORS, JOURNALISTS AND EDITORS	264		AUTHORS, JOURNALISTS AND EDITORS
	2641	Authors and Related Writers		2641	Authors and Related Writers
	2642	Journalists		2642	Journalists
	2643	Translators, Interpreters and Other Linguists			
265		CREATIVE AND PERFORMING ARTISTS	265		CREATIVE AND PERFORMING ARTISTS
	2651	Visual Artists		2651	Visual Artists
	2652	Musicians, Composers and Singers		2652	Musicians, Composers and Singers
	2653	Dancers and Choreographers		2653	Dancers and Choreographers
	2654	Film, Stage and Related Directors and Producers		2654	Film, Stage and Related Directors and Producers
	2655	Actors		2655	Actors
	2656	Radio and Television Presenters and Related Professionals			
<b>29</b>		<b>OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>	<b>29</b>		<b>OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>
290		OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED	290		OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED
	2901	Religious Professionals		2901	Religious Professionals
	2909	Other Professionals Not Elsewhere Classified		2909	Other Professionals Not Elsewhere Classified

**3 ASSOCIATE PROFESSIONALS AND TECHNICIANS**

**3 ASSOCIATE PROFESSIONALS AND TECHNICIANS**

SSOC 2015			SSOC 2010		
<b>31</b>	<b>PHYSICAL AND ENGINEERING SCIENCE ASSOCIATE PROFESSIONALS</b>		<b>31</b>	<b>PHYSICAL AND ENGINEERING SCIENCE ASSOCIATE PROFESSIONALS</b>	
310	3100	ASSISTANT ENGINEERS Assistant Engineers	310	3100	ASSISTANT ENGINEERS Assistant Engineers
311		PHYSICAL AND ENGINEERING SCIENCE TECHNICIANS	311		PHYSICAL AND ENGINEERING SCIENCE TECHNICIANS
	3111	Chemical and Physical Science Technicians		3111	Chemical and Physical Science Technicians
	3112	Civil Engineering Technicians		3112	Civil Engineering Technicians
	3113	Electrical Engineering Technicians		3113	Electrical Engineering Technicians
	3114	Electronics Engineering Technicians		3114	Electronics Engineering Technicians
	3115	Mechanical Engineering Technicians		3115	Mechanical Engineering Technicians
	3116	Chemical Engineering Technicians		3116	Chemical Engineering Technicians
	3117	Manufacturing Engineering Technicians		3117	Manufacturing Engineering Technicians
	3118	Draughtsmen		3118	Draughtsmen
	3119	Physical and Engineering Science Technicians Not Elsewhere Classified		3119	Physical and Engineering Science Technicians Not Elsewhere Classified
314		LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS	314		LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS
	3141	Life Science Technicians (Except Medical)		3141	Life Science Technicians (Except Medical)
	3142	Agronomy, Horticultural and Farming Technicians		3142	Agronomy, Horticultural and Farming Technicians

SSOC 2015			SSOC 2010		
315		SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS	315		SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS
	3151	Ship Engineering Officers		3151	Ships' Engineers
	3152	Ships' Deck Officers and Pilots		3152	Ships' Deck Officers and Pilots
	3154	Air Traffic Controllers		3153	Aircraft Pilots and Related Associate Professionals
	3156	Sea Traffic Controllers		3154	Air Traffic Controllers
	3157	Transport Operations Supervisors		3156	Sea Traffic Controllers
	3159	Transport Controllers and Related Workers Not Elsewhere Classified		3157	Transport Operations Supervisors
				3159	Transport Controllers and Related Workers Not Elsewhere Classified
316		PREMISES AND PARKS OFFICERS	316		PREMISES AND PARKS OFFICERS
	3160	Premises and Parks Officers		3160	Premises and Parks Officers
317		BUILDING, QUALITY AND SAFETY INSPECTORS	317		BUILDING, QUALITY AND SAFETY INSPECTORS
	3171	Building and Fire Inspectors		3171	Building and Fire Inspectors
	3172	Quality and Safety Inspectors		3172	Quality and Safety Inspectors
<b>32</b>		<b>HEALTH ASSOCIATE PROFESSIONALS</b>	<b>32</b>		<b>HEALTH ASSOCIATE PROFESSIONALS</b>
321		MEDICAL AND PHARMACEUTICAL TECHNICIANS	321		MEDICAL AND PHARMACEUTICAL TECHNICIANS
	3211	Medical Imaging and Therapeutic Equipment Technicians		3211	Medical Imaging and Therapeutic Equipment Technicians
	3212	Medical and Pathology Laboratory Technicians		3212	Medical and Pathology Laboratory Technicians
	3213	Pharmacy Technicians		3213	Pharmaceutical Technicians
	3214	Medical and Dental Prosthetic Technicians		3214	Medical and Dental Prosthetic Technicians

SSOC 2015			SSOC 2010		
322	3220	NURSING ASSOCIATE PROFESSIONALS Nursing Associate Professionals	322	3220	NURSING ASSOCIATE PROFESSIONALS Nursing Associate Professionals
323	3230	TRADITIONAL AND COMPLEMENTARY MEDICINE ASSOCIATE PROFESSIONALS Traditional and Complementary Medicine Associate Professionals	323	3230	TRADITIONAL AND COMPLEMENTARY MEDICINE ASSOCIATE PROFESSIONALS Traditional and Complementary Medicine Associate Professionals
324	3240	VETERINARY TECHNICIANS AND ASSISTANTS Veterinary Technicians and Assistants	324	3240	VETERINARY TECHNICIANS AND ASSISTANTS Veterinary Technicians and Assistants
325	3251	OTHER HEALTH ASSOCIATE PROFESSIONALS Dental Assistants and Therapists	325	3251	OTHER HEALTH ASSOCIATE PROFESSIONALS Dental Nurses and Therapists
	3253	Community Health Workers		3252	Dietitians and Nutritionists
	3254	Opticians		3253	Audiologists and Speech Therapists
	3255	Physiotherapy Technicians and Related Associate Professionals		3254	Optometrists and Opticians
	3257	Environmental and Occupational Health Inspectors		3255	Physiotherapists and Related Associate Professionals
	3259	Health Associate Professionals Not Elsewhere Classified		3256	Occupational Therapists
				3257	Environmental and Occupational Health Inspectors
				3259	Health Associate Professionals Not Elsewhere Classified

SSOC 2015		SSOC 2010	
<b>33</b>	<b>BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS</b>	<b>33</b>	<b>BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS</b>
331	FINANCIAL AND MATHEMATICAL ASSOCIATE PROFESSIONALS	331	FINANCIAL AND MATHEMATICAL ASSOCIATE PROFESSIONALS
3312	Credit and Loans Officers	3311	Securities and Finance Dealers and Brokers
3313	Accounting Associate Professionals	3312	Credit and Loans Officers
3315	Valuers and Loss Assessors	3313	Accounting Associate Professionals
		3314	Statistical, Mathematical and Actuarial Associate Professionals
		3315	Valuers and Loss Assessors
332	SALES AND RELATED ASSOCIATE PROFESSIONALS	332	SALES AND RELATED ASSOCIATE PROFESSIONALS
3321	Insurance Representatives and Related Associate Professionals	3321	Insurance Representatives
3322	Commercial and Marketing Sales Executives	3322	Commercial and Marketing Sales Representatives
3323	Buyers and Purchasing Agents	3323	Buyers and Purchasing Agents
3329	Sales and Related Associate Professionals Not Elsewhere Classified	3324	Trade and Ship Brokers
		3329	Sales and Related Associate Professionals Not Elsewhere Classified
333	BUSINESS SERVICES AGENTS	333	BUSINESS SERVICES AGENTS
3331	Shipping, Clearing and Forwarding Agents	3331	Shipping, Clearing and Forwarding Agents
3332	Conference and Event Planners	3332	Conference and Event Planners
3333	Employment Agents and Labour Contractors	3333	Employment Agents and Labour Contractors
3334	Real Estate Agents	3334	Real Estate Agents
3339	Business Services Agents Not Elsewhere Classified	3339	Business Services Agents Not Elsewhere Classified
334	ADMINISTRATIVE ASSOCIATE PROFESSIONALS	334	ADMINISTRATIVE ASSOCIATE PROFESSIONALS
3345	Human Resource Associate Professionals	3345	Public Relations Associate Professionals
3349	Administrative and Related Associate Professionals Not Elsewhere Classified	3346	Human Resource Associate Professionals
		3349	Administrative and Related Associate Professionals Not Elsewhere Classified

SSOC 2015			SSOC 2010		
335		GOVERNMENT ASSOCIATE PROFESSIONALS	335		GOVERNMENT ASSOCIATE PROFESSIONALS
	3351	Customs and Immigration Officers		3351	Customs and Immigration Officers
	3355	Police Inspectors		3355	Police Inspectors
	3359	Government Associate Professionals Not Elsewhere Classified		3359	Government Associate Professionals Not Elsewhere Classified
<b>34</b>		<b>LEGAL, SOCIAL, CULTURAL AND RELATED ASSOCIATE PROFESSIONALS</b>	<b>34</b>		<b>LEGAL, SOCIAL, CULTURAL AND RELATED ASSOCIATE PROFESSIONALS</b>
341		LEGAL AND SOCIAL ASSOCIATE PROFESSIONALS	341		LEGAL AND SOCIAL ASSOCIATE PROFESSIONALS
	3411	Legal Associate Professionals		3411	Legal Associate Professionals
	3412	Social Work Associate Professionals		3412	Social Work Associate Professionals
342		SPORTS AND FITNESS WORKERS	342		SPORTS AND FITNESS WORKERS
	3421	Athletes and Sportsmen		3421	Athletes and Sportsmen
	3422	Sports Coaches, Instructors, Officials and Other Related Associate Professionals		3422	Sports Coaches, Instructors, Officials and Other Related Associate Professionals
343		ARTISTIC AND CULTURAL ASSOCIATE PROFESSIONALS	343		ARTISTIC AND CULTURAL ASSOCIATE PROFESSIONALS
	3431	Photographers		3431	Photographers
	3432	Interior Designers and Decorators		3432	Interior Designers and Decorators
	3433	Gallery, Museum and Library Technicians		3433	Gallery, Museum and Library Technicians
	3434	Chefs			
	3439	Artistic and Cultural Associate Professionals Not Elsewhere Classified		3435	Fashion, Garment and Product Designers
				3436	Graphic and Multimedia Designers and Artists
				3439	Artistic and Cultural Associate Professionals Not Elsewhere Classified

SSOC 2015		SSOC 2010	
344	CREATIVE AND PERFORMING ARTS ASSOCIATE PROFESSIONALS	344	PERFORMING ASSOCIATE PROFESSIONALS
3440	Creative and Performing Arts Associate Professionals	3441	Radio and Television Presenters and Related Associate Professionals
		3442	Clowns, Magicians, Acrobats and Related Associate Professionals
<b>35</b>	<b>INFORMATION AND COMMUNICATIONS TECHNICIANS</b>	<b>35</b>	<b>INFORMATION AND COMMUNICATIONS TECHNICIANS</b>
351	INFORMATION AND COMMUNICATIONS TECHNOLOGY OPERATORS AND TECHNICIANS	351	INFORMATION AND COMMUNICATIONS TECHNOLOGY OPERATORS AND TECHNICIANS
3511	Computer Systems Operators	3511	Computer Systems Operators
3512	Computer Technicians	3512	Computer Technicians
3514	Website Administrators	3514	Website Administrators
352	TELECOMMUNICATIONS AND BROADCASTING TECHNICIANS AND AUDIO-VISUAL OPERATORS	352	TELECOMMUNICATIONS AND BROADCASTING TECHNICIANS AND AUDIO-VISUAL OPERATORS
3521	Broadcasting Technicians and Audio-Visual Operators	3521	Broadcasting Technicians and Audio-Visual Operators
3522	Telecommunications Engineering Technicians	3522	Telecommunications Engineering Technicians
3523	Telecommunications Equipment Operators	3523	Telecommunications Equipment Operators
3529	Optical and Electronic Equipment Operators Not Elsewhere Classified	3529	Optical and Electronic Equipment Operators Not Elsewhere Classified



SSOC 2015			SSOC 2010		
<b>36</b>	<b>TEACHING ASSOCIATE PROFESSIONALS</b>		<b>36</b>	<b>TEACHING ASSOCIATE PROFESSIONALS</b>	
361	3610	PRE-PRIMARY EDUCATION TEACHERS Pre-Primary Education Teachers	361	3610	PRE-PRIMARY EDUCATION TEACHERS Pre-Primary Education Teachers
362	3620	EXTRACURRICULUM INSTRUCTORS Extracurriculum Instructors	362	3620	EXTRACURRICULUM INSTRUCTORS Extracurriculum Instructors
369		TEACHING ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED	369		TEACHING ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED
	3691	Private Tutors		3691	Private Tutors
	3699	Teaching Associate Professionals Not Elsewhere Classified		3699	Teaching Associate Professionals Not Elsewhere Classified
<b>39</b>	<b>OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>		<b>39</b>	<b>OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>	
			391		TRANSLATORS AND INTERPRETERS
				3910	Translators and Interpreters
399		OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED	399		OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED
	3991	Religious Associate Professionals		3991	Religious Associate Professionals
	3999	Other Associate Professionals Not Elsewhere Classified		3999	Other Associate Professionals Not Elsewhere Classified

4 CLERICAL SUPPORT WORKERS

4 CLERICAL SUPPORT WORKERS

SSOC 2015			SSOC 2010		
<b>40 CLERICAL SUPERVISORS</b>			<b>40 CLERICAL SUPERVISORS</b>		
400	4000	CLERICAL SUPERVISORS Clerical Supervisors	400	4000	CLERICAL SUPERVISORS Clerical Supervisors
<b>41 GENERAL AND KEYBOARD CLERKS</b>			<b>41 GENERAL AND KEYBOARD CLERKS</b>		
411	4110	GENERAL OFFICE CLERKS General Office Clerks	411	4110	GENERAL OFFICE CLERKS General Office Clerks
412	4120	SECRETARIES AND VERBATIM REPORTERS Secretaries and Verbatim Reporters	412	4120	SECRETARIES AND VERBATIM REPORTERS Secretaries and Verbatim Reporters
413	4131 4132	KEYBOARD OPERATORS Typists and Word Processing Operators Data Entry Clerks	413	4131 4132	KEYBOARD OPERATORS Typists and Word Processing Operators Data Entry Clerks

SSOC 2015			SSOC 2010		
<b>42</b>	<b>CUSTOMER SERVICES OFFICERS AND CLERKS</b>		<b>42</b>	<b>CUSTOMER SERVICES CLERKS</b>	
421	TELLERS, MONEY COLLECTORS AND RELATED CLERKS		421	TELLERS, MONEY COLLECTORS AND RELATED CLERKS	
	4211	Bank Tellers and Other Counter Clerks		4211	Bank Tellers and Other Counter Clerks
	4213	Pawnbrokers and Moneylenders		4213	Pawnbrokers and Moneylenders
	4214	Bill Collectors and Related Workers		4214	Bill collectors and Related Workers
422	CLIENT INFORMATION CLERKS		422	CLIENT INFORMATION CLERKS	
	4221	Travel Agency and Related Clerks		4221	Travel Agency and Related Clerks
	4223	Telephone Operators		4223	Telephone Operators
	4224	Receptionists, Customer Service and Information Clerks		4224	Receptionists and Information Clerks
	4229	Client Information Clerks Not Elsewhere Classified		4229	Client Information Clerks Not Elsewhere Classified
<b>43</b>	<b>NUMERICAL AND MATERIAL-RECORDING CLERKS</b>		<b>43</b>	<b>NUMERICAL AND MATERIAL-RECORDING CLERKS</b>	
431	NUMERICAL CLERKS		431	NUMERICAL CLERKS	
	4311	Accounting and Bookkeeping Clerks		4311	Accounting and Bookkeeping Clerks
	4312	Finance and Insurance Clerks		4312	Finance and Insurance Clerks
	4314	Statistical Clerks		4314	Statistical Clerks
	4315	Computer Operations Clerks		4315	Computer Operations Clerks
432	MATERIAL-RECORDING AND TRANSPORT CLERKS		432	MATERIAL-RECORDING AND TRANSPORT CLERKS	
	4321	Stock Clerks		4321	Stock Clerks
	4322	Production Clerks		4322	Production Clerks
	4323	Transport Clerks		4323	Transport Clerks
<b>44</b>	<b>OTHER CLERICAL SUPPORT WORKERS</b>		<b>44</b>	<b>OTHER CLERICAL SUPPORT WORKERS</b>	
441	OTHER CLERICAL SUPPORT WORKERS		441	OTHER CLERICAL SUPPORT WORKERS	
	4411	Library Clerks		4411	Library Clerks
	4417	Legal Clerks		4417	Legal Clerks
	4419	Clerical Support Workers Not Elsewhere Classified		4419	Clerical Support Workers Not Elsewhere Classified

**5 SERVICE AND SALES WORKERS**

**5 SERVICE AND SALES WORKERS**

<b>SSOC 2015</b>			<b>SSOC 2010</b>		
<b>51</b>	<b>PERSONAL SERVICE WORKERS</b>		<b>51</b>	<b>PERSONAL SERVICE WORKERS</b>	
511		TRAVEL ATTENDANTS, CONDUCTORS AND GUIDES	511		TRAVEL ATTENDANTS, CONDUCTORS AND GUIDES
	5111	Travel Attendants and Stewards		5111	Travel Attendants and Stewards
	5112	Transport Service Inspectors and Related Workers		5112	Transport Service Inspectors and Related Workers
	5113	Tour and Other Guides		5113	Tourist and Other Guides
512		COOKS	512		CHEFS AND COOKS
	5120	Cooks		5120	Chefs and Cooks
513		WAITERS AND BARTENDERS	513		WAITERS AND BARTENDERS
	5131	Waiters		5131	Waiters
	5132	Bartenders and Baristas		5132	Bartenders
	5133	Bar/Lounge Hostesses		5133	Bar/Lounge Hostesses
	5139	Waiters and Bartenders Not Elsewhere Classified		5139	Waiters and Bartenders Not Elsewhere Classified
514		HAIRDRESSERS, BEAUTICIANS AND RELATED WORKERS	514		HAIRDRESSERS, BEAUTICIANS AND RELATED WORKERS
	5141	Hairdressers, Barbers and Other Related Workers		5141	Hairdressers, Barbers and Other Related Workers
	5142	Beauticians and Related Workers		5142	Beauticians and Related Workers
	5149	Wellness Related Workers Not Elsewhere Classified		5149	Wellness Related Workers Not Elsewhere Classified
515		HOUSEKEEPERS AND RELATED WORKERS	515		HOUSEKEEPERS AND RELATED WORKERS
	5150	Housekeepers and Related Workers		5150	Housekeepers and Related Workers

SSOC 2015			SSOC 2010		
516	5160	MAIL CARRIERS AND SORTING WORKERS Mail Carriers and Sorting Workers	516	5160	MAIL CARRIERS AND SORTING WORKERS Mail Carriers and Sorting Workers
517	5170	BOOKMAKERS, CROUPIERS AND RELATED GAMING WORKERS Bookmakers, Croupiers and Related Gaming workers	517	5170	BOOKMAKERS, CROUPIERS AND RELATED GAMING WORKERS Bookmakers, Croupiers and Related Gaming workers
519		PERSONAL SERVICE WORKERS NOT ELSEWHERE CLASSIFIED	519		PERSONAL SERVICE WORKERS NOT ELSEWHERE CLASSIFIED
	5191	Astrologers, Fortune-tellers and Related Workers		5191	Astrologers, Fortune-tellers and Related Workers
	5193	Undertakers and Embalmers		5193	Undertakers and Embalmers
	5194	Pet Groomers, Animal Keepers and Trainers		5194	Pet Groomers, Animal Keepers and Trainers
	5195	Driving Instructors		5195	Driving Instructors
	5199	Personal Service Workers Not Elsewhere Classified		5199	Personal Service Workers Not Elsewhere Classified
<b>52</b>		<b>SALES WORKERS</b>	<b>52</b>		<b>SALES WORKERS</b>
521		STALL SALES WORKERS	521		STALL SALES WORKERS
	5211	Hawker/Stall Holders (Excluding Prepared Food Or Drinks)		5211	Hawker/Stall Holders (Excluding Prepared Food Or Drinks)
	5212	Hawker/Stall Holders (Prepared Food Or Drinks)		5212	Hawker/Stall Holders (Prepared Food Or Drinks)
	5213	Newsvendors		5213	Newsvendors
	5219	Other Stall Sales Workers		5219	Other Stall Sales Workers
522		SHOP SALESPERSONS	522		SHOP SALESPERSONS
	5220	Shop and Store Salespersons		5220	Shop and Store Salespersons
523		CASHIERS AND TICKET CLERKS	523		CASHIERS AND TICKET CLERKS
	5230	Cashiers and Ticket Clerks		5230	Cashiers and Ticket Clerks

SSOC 2015		SSOC 2010	
524	MODELS, SALES DEMONSTRATORS AND OTHER SALES WORKERS	524	MODELS, SALES DEMONSTRATORS AND OTHER SALES WORKERS
5241	Fashion and Other Models	5241	Fashion and Other Models
5242	Sales Demonstrators and Door-to-Door Salespersons	5242	Sales Demonstrators and Door-to-Door Salespersons
5244	Contact Centre Salespersons	5244	Contact Centre Salespersons
5249	Sales Workers Not Elsewhere Classified	5249	Sales Workers Not Elsewhere Classified
<b>53</b>	<b>PERSONAL CARE WORKERS</b>	<b>53</b>	<b>PERSONAL CARE WORKERS</b>
531	CHILD CARE WORKERS AND TEACHERS' AIDES	531	CHILD CARE WORKERS AND TEACHERS' AIDES
5311	Child Care and Related Workers	5311	Child Care and Related Workers
5312	Teachers' Aides	5312	Teachers' Aides
532	HEALTHCARE ASSISTANTS AND OTHER PERSONAL CARE WORKERS	532	HEALTHCARE ASSISTANTS AND OTHER PERSONAL CARE WORKERS
5320	Healthcare Assistants and Other Personal Care Workers	5320	Healthcare Assistants and Other Personal Care Workers
<b>54</b>	<b>PROTECTIVE SERVICES WORKERS</b>	<b>54</b>	<b>PROTECTIVE SERVICES WORKERS</b>
541	PROTECTIVE SERVICES WORKERS	541	PROTECTIVE SERVICES WORKERS
5411	Fire-Fighting and Rescue Officers	5411	Fire-Fighting and Rescue Officers
5412	Police Officers	5412	Police Officers
5413	Prison Officers	5413	Prison Officers
5414	Security Guards	5414	Security Guards
5415	Lifeguards	5415	Lifeguards
5419	Protective Services and Related Workers Not Elsewhere Classified	5419	Protective Services and Related Workers Not Elsewhere Classified
<b>59</b>	<b>SERVICE WORKERS NOT ELSEWHERE CLASSIFIED</b>	<b>59</b>	<b>SERVICE WORKERS NOT ELSEWHERE CLASSIFIED</b>
590	SERVICE WORKERS NOT ELSEWHERE CLASSIFIED	590	SERVICE WORKERS NOT ELSEWHERE CLASSIFIED
5900	Service Workers Not Elsewhere Classified	5900	Service Workers Not Elsewhere Classified

**6 AGRICULTURAL AND FISHERY WORKERS**

**6 AGRICULTURAL AND FISHERY WORKERS**

<b>SSOC 2015</b>			<b>SSOC 2010</b>		
<b>61</b>	<b>AGRICULTURAL WORKERS</b>		<b>61</b>	<b>AGRICULTURAL WORKERS</b>	
611		MARKET GARDENERS AND CROP GROWERS	611		MARKET GARDENERS AND CROP GROWERS
	6111	Vegetable Farm Workers		6111	Vegetable Farm Workers
	6113	Gardeners, Horticultural and Nursery Farm Workers		6113	Gardeners, Horticultural and Nursery Farm Workers
612		ANIMAL PRODUCERS	612		ANIMAL PRODUCERS
	6121	Livestock and Dairy Farm Workers		6121	Livestock and Dairy Farm Workers
	6122	Poultry Farm Workers		6122	Poultry Farm Workers
619		AGRICULTURALWORKERS NOT ELSEWHERE CLASSIFIED	619		AGRICULTURALWORKERS NOT ELSEWHERE CLASSIFIED
	6190	Agricultural Workers Not Elsewhere Classified		6190	Agricultural Workers Not Elsewhere Classified
<b>62</b>	<b>FISHERY WORKERS</b>		<b>62</b>	<b>FISHERY WORKERS</b>	
622		FISHERY WORKERS	622		FISHERY WORKERS
	6221	Aquaculture Workers		6221	Aquaculture Workers
	6222	Coastal Waters and Deep Sea Fishery Workers		6222	Coastal Waters and Deep Sea Fishery Workers

## 7 CRAFTSMEN AND RELATED TRADES WORKERS

## 7 CRAFTSMEN AND RELATED TRADES WORKERS

SSOC 2015		SSOC 2010	
<b>71</b>	<b>BUILDING AND RELATED TRADES WORKERS, EXCLUDING ELECTRICIANS</b>	<b>71</b>	<b>BUILDING AND RELATED TRADES WORKERS, EXCLUDING ELECTRICIANS</b>
710	SUPERVISORS AND GENERAL FOREMEN (BUILDING AND RELATED TRADES)	710	SUPERVISORS AND GENERAL FOREMEN (BUILDING AND RELATED TRADES)
7100	Supervisors and General Foremen (Building and Related Trades)	7100	Supervisors and General Foremen (Building and Related Trades)
711	BUILDING FRAME AND RELATED TRADES WORKERS	711	BUILDING FRAME AND RELATED TRADES WORKERS
7112	Bricklayers and Related Workers	7112	Bricklayers and Related Workers
7113	Stone Cutters, Splitters, Carvers and Stonemasons	7113	Stone Cutters, Splitters, Carvers and Stonemasons
7114	Concrete Placers, Concrete Finishers and Related Workers	7114	Concrete Placers, Concrete Finishers and Related Workers
7115	Carpenters and Joiners	7115	Carpenters and Joiners
7119	Building Frame and Related Trades Workers Not Elsewhere Classified	7119	Building Frame and Related Trades Workers Not Elsewhere Classified
712	BUILDING FINISHERS AND RELATED TRADES WORKERS	712	BUILDING FINISHERS AND RELATED TRADES WORKERS
7121	Roofers	7121	Roofers
7122	Floor Layers and Tile Setters	7122	Floor Layers and Tile Setters
7123	Plasterers	7123	Plasterers
7124	Insulation Workers	7124	Insulation Workers
7125	Glaziers	7125	Glaziers
7126	Plumbers, Pipe Fitters and Related Workers	7126	Plumbers, Pipe Fitters and Related Workers
7127	Air-Conditioning and Refrigeration Mechanics	7127	Air-Conditioning and Refrigeration Mechanics
7129	Building Finishers and Related Trades Workers Not Elsewhere Classified	7129	Building Finishers and Related Trades Workers Not Elsewhere Classified



SSOC 2015		SSOC 2010	
713	PAINTERS, BUILDING STRUCTURE CLEANERS AND RELATED WORKERS	713	PAINTERS, BUILDING STRUCTURE CLEANERS AND RELATED WORKERS
7131	Building Painters and Related Workers	7131	Building Painters and Related Workers
7132	Spray Painters, Varnishers and Other Painters	7132	Spray Painters, Varnishers and Other Painters
7133	Building Maintenance Workers, Building Structure Cleaners and Related Workers	7133	Building Maintenance Workers, Building Structure Cleaners and Related Workers
<b>72</b>	<b>METAL, MACHINERY AND RELATED TRADES WORKERS</b>	<b>72</b>	<b>METAL, MACHINERY AND RELATED TRADES WORKERS</b>
720	SUPERVISORS AND GENERAL FOREMEN (METAL, MACHINERY AND RELATED TRADES)	720	SUPERVISORS AND GENERAL FOREMEN (METAL, MACHINERY AND RELATED TRADES)
7200	Supervisors and General Foreman (Metal, Machinery and Related Trades)	7200	Supervisors and General Foreman (Metal, Machinery and Related Trades)
721	SHEET AND STRUCTURAL METAL WORKERS, MOULDERS AND WELDERS AND RELATED TRADES WORKERS	721	SHEET AND STRUCTURAL METAL WORKERS, MOULDERS AND WELDERS AND RELATED TRADES WORKERS
7211	Metal Moulders and Coremakers	7211	Metal Moulders and Coremakers
7212	Welders and Flame Cutters	7212	Welders and Flame Cutters
7213	Sheet Metal Workers	7213	Sheet Metal Workers
7214	Structural Metal Preparers and Erectors	7214	Structural Metal Preparers and Erectors
7215	Riggers and Cable Splicers	7215	Riggers and Cable Splicers

SSOC 2015		SSOC 2010	
722	BLACKSMITHS, TOOLMAKERS AND RELATED TRADES WORKERS	722	BLACKSMITHS, TOOLMAKERS AND RELATED TRADES WORKERS
7221	Blacksmiths, Hammersmiths and Forging-Press Workers	7221	Blacksmiths, Hammersmiths and Forging-Press Workers
7222	Toolmakers and Related Workers	7222	Toolmakers and Related Workers
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	7224	Metal Polishers, Wheel Grinders and Tool Sharpeners
723	MACHINERY MECHANICS, FITTERS AND REPAIRERS	723	MACHINERY MECHANICS, FITTERS AND REPAIRERS
7231	Motor Vehicle Mechanics and Repairers	7231	Motor Vehicle Mechanics and Repairers
7232	Aircraft Engine Mechanics and Repairers	7232	Aircraft Engine Mechanics and Repairers
7233	Other Machinery Mechanics and Repairers	7233	Other Machinery Mechanics and Repairers
<b>73</b>	<b>PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES WORKERS</b>	<b>73</b>	<b>PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES WORKERS</b>
730	SUPERVISORS AND GENERAL FOREMEN (PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES)	730	SUPERVISORS AND GENERAL FOREMEN (PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES)
7300	Supervisors and General Foremen (Precision, Handicraft, Printing and Related Trades)	7300	Supervisors and General Foremen (Precision, Handicraft, Printing and Related Trades)

SSOC 2015			SSOC 2010		
731		HANDICRAFT AND PRECISION WORKERS	731		HANDICRAFT AND PRECISION WORKERS
	7311	Precision Instrument Makers and Repairers		7311	Precision Instrument Makers and Repairers
	7312	Musical Instrument Makers, Repairers and Tuners		7312	Musical Instrument Makers, Repairers and Tuners
	7313	Jewellery and Precious Metal Workers		7313	Jewellery and Precious Metal Workers
	7314	Potters and Related Workers		7314	Potters and Related Workers
	7315	Glass Makers, Cutters, Grinders and Finishers		7315	Glass Makers, Cutters, Grinders and Finishers
	7316	Sign Writers, Decorative Painters, Engravers and Etchers		7316	Sign Writers, Decorative Painters, Engravers and Etchers
732		PRINTING TRADES WORKERS	732		PRINTING TRADES WORKERS
	7321	Pre-Press Trades Workers		7321	Pre-Press Trades Workers
	7322	Printers		7322	Printers
<b>74</b>		<b>ELECTRICAL AND ELECTRONIC TRADES WORKERS</b>	<b>74</b>		<b>ELECTRICAL AND ELECTRONIC TRADES WORKERS</b>
740		SUPERVISORS AND GENERAL FOREMAN (ELECTRICAL AND ELECTRONIC TRADES)	740		SUPERVISORS AND GENERAL FOREMAN (ELECTRICAL AND ELECTRONIC TRADES)
	7400	Supervisors and General Foreman (Electrical and Electronic Trades)		7400	Supervisors and General Foreman (Electrical and Electronic Trades)

SSOC 2015			SSOC 2010		
741		ELECTRICAL EQUIPMENT RELATED TRADES WORKERS	741		ELECTRICAL EQUIPMENT RELATED TRADES WORKERS
	7411	Electricians		7411	Electricians
	7412	Electrical Mechanics and Fitters		7412	Electrical Mechanics and Fitters
	7413	Electrical Line Installers and Repairers		7413	Electrical Line Installers and Repairers
742		ELECTRONICS AND TELECOMMUNICATIONS RELATED TRADES WORKERS	742		ELECTRONICS AND TELECOMMUNICATIONS AND RELATED TRADES WORKERS
	7421	Electronics Mechanics and Servicers		7421	Electronics Mechanics and Servicers
	7422	Information and Communications Technology Installers and Servicers		7422	Information and Communications Technology Installers and Servicers
<b>75</b>		<b>FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND OTHER CRAFT AND RELATED TRADES WORKERS</b>	<b>75</b>		<b>FOOD PROCESSING, WOOD WORKING, GARMENT, LEATHER AND OTHER CRAFT AND RELATED TRADES WORKERS</b>
750		SUPERVISORS AND GENERAL FOREMEN (FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND RELATED TRADES)	750		SUPERVISORS AND GENERAL FOREMEN (FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND RELATED TRADES)
	7500	Supervisors and General Foreman (Food Processing, Woodworking, Garment, Leather and Related Trades)		7500	Supervisors and General Foreman (Food Processing, Woodworking, Garment, Leather and Related Trades)
751		FOOD PROCESSING AND RELATED TRADES WORKERS	751		FOOD PROCESSING AND RELATED TRADES WORKERS
	7511	Meat and Fish Preparers		7511	Meat and Fish Preparers
	7512	Bakers, Pastry and Confectionery Makers		7512	Bakers, Pastry and Confectionery Makers
	7515	Food and Beverage Tasters and Graders		7515	Food and Beverage Tasters and Graders
	7519	Food Processing and Related Trades Workers Not Elsewhere Classified		7519	Food Processing and Related Trades Workers Not Elsewhere Classified

SSOC 2015		SSOC 2010	
752	WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS	752	WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS
7521	Wood Treaters	7521	Wood Treaters
7522	Cabinet Makers and Wood Related Trades Workers	7522	Cabinet Makers and Wood Related Trades Workers
7529	Furniture Makers and Related Trades Workers Not Elsewhere Classified	7529	Furniture Makers and Related Trades Workers Not Elsewhere Classified
753	GARMENT, LEATHER AND RELATED TRADES WORKERS	753	GARMENT, LEATHER AND RELATED TRADES WORKERS
7531	Tailors/Dressmakers	7531	Tailors/Dressmakers
7532	Garment and Related Pattern-Makers and Cutters	7532	Garment and Related Pattern-Makers and Cutters
7534	Upholsterers and Related Workers	7534	Upholsterers and Related Workers
7536	Shoemakers and Related Workers	7536	Shoemakers and Related Workers
7539	Garment and Related Trades Workers Not Elsewhere Classified	7539	Garment and Related Trades Workers Not Elsewhere Classified
754	OTHER CRAFT AND RELATED WORKERS	754	OTHER CRAFT AND RELATED WORKERS
7540	Other Craft and Related Workers	7540	Other Craft and Related Workers

**8 PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

**8 PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

<b>SSOC 2015</b>		<b>SSOC 2010</b>	
<b>81</b>	<b>STATIONARY PLANT AND MACHINE OPERATORS</b>	<b>81</b>	<b>STATIONARY PLANT AND MACHINE OPERATORS</b>
810	STATIONARY PLANT AND MACHINE SUPERVISORS AND GENERAL FOREMEN	810	STATIONARY PLANT AND MACHINE SUPERVISORS AND GENERAL FOREMEN
8100	Stationary Plant and Machine Supervisors and General Foremen	8100	Stationary Plant and Machine Supervisors and General Foremen
811	MINING AND MINERAL PROCESSING PLANT OPERATORS	811	MINING AND MINERAL PROCESSING PLANT OPERATORS
8113	Well Drillers and Borers and Other Mining Related Workers	8113	Well Drillers and Borers and Other Mining Related Workers
8114	Cement and Other Mineral Products Machine Operators	8114	Cement and Other Mineral Products Machine Operators
812	METAL PROCESSING, FINISHING AND PRODUCTS PLANT OPERATORS	812	METAL PROCESSING, FINISHING AND PRODUCTS PLANT OPERATORS
8121	Metal Melters, Casters and Rolling Mill Operators	8121	Metal Melters, Casters and Rolling Mill Operators
8122	Metal Heat Treating Plant Operators	8122	Metal Heat Treating Plant Operators
8123	Metal Drawers and Extruders	8123	Metal Drawers and Extruders
8124	Metal Finishing, Plating and Coating Machine Operators	8124	Metal Finishing, Plating and Coating Machine Operators
8125	Machine-Tool Setter-Operators	8125	Machine-Tool Setter-Operators
813	CHEMICAL PROCESSING, CHEMICAL AND PHOTOGRAPHIC PRODUCTS PLANT AND MACHINE OPERATORS	813	CHEMICAL PROCESSING, CHEMICAL AND PHOTOGRAPHIC PRODUCTS PLANT AND MACHINE OPERATORS
8131	Chemical Processing and Chemical Products Plant and Machine Operators	8131	Chemical Processing and Chemical Products Plant and Machine Operators
8132	Photographic Products Machine Operators	8132	Photographic Products Machine Operators
8133	Pharmaceutical and Toiletry Products Machine Operators	8133	Pharmaceutical and Toiletry Products Machine Operators
8139	Chemical Processing, Chemical and Photographic Products Plant and Machine Operators Not Elsewhere Classified	8139	Chemical Processing, Chemical and Photographic Products Plant and Machine Operators Not Elsewhere Classified

SSOC 2015		SSOC 2010	
814	RUBBER, PLASTIC AND PAPER PRODUCTS MACHINE OPERATORS	814	RUBBER, PLASTIC AND PAPER PRODUCTS MACHINE OPERATORS
8141	Rubber Products Machine Operators	8141	Rubber Products Machine Operators
8142	Plastic Products Machine Operators	8142	Plastic Products Machine Operators
8143	Paper and Paperboard Products Machine Operators	8143	Paper and Paperboard Products Machine Operators
815	TEXTILE, FUR AND LEATHER PRODUCTS MACHINE OPERATORS	815	TEXTILE, FUR AND LEATHER PRODUCTS MACHINE OPERATORS
8151	Fibre Preparing, Spinning and Winding Machine Operators	8151	Fibre Preparing, Spinning and Winding Machine Operators
8152	Weaving and Knitting Machine Operators	8152	Weaving and Knitting Machine Operators
8153	Sewing Machine Operators	8153	Sewing Machine Operators
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators
8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified
816	FOOD AND RELATED PRODUCTS MACHINE OPERATORS	816	FOOD AND RELATED PRODUCTS MACHINE OPERATORS
8161	Meat and Fish Products Machine Operators	8161	Meat and Fish Products Machine Operators
8162	Dairy and Confectionery Products Machine Operators	8162	Dairy and Confectionery Products Machine Operators
8163	Grain and Spice Milling Machine Operators	8163	Grain and Spice Milling Machine Operators
8164	Baked and Cereal Products Machine Operators	8164	Baked and Cereal Products Machine Operators
8165	Fruit, Vegetable and Nut Products Machine Operators	8165	Fruit, Vegetable and Nut Products Machine Operators
8166	Sugar Processing and Refining Machine Operators	8166	Sugar Processing and Refining Machine Operators
8167	Brewers and Wine and Other Beverage Machine Operators	8167	Brewers and Wine and Other Beverage Machine Operators
8168	Tobacco Products Machine Operators	8168	Tobacco Products Machine Operators
8169	Food and Related Products Machine Operators Not Elsewhere Classified	8169	Food and Related Products Machine Operators Not Elsewhere Classified

SSOC 2015		SSOC 2010	
817	WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS	817	WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS
8171	Pulp and Papermaking Plant Operators	8171	Pulp and Papermaking Plant Operators
8172	Wood Processing Plant Operators	8172	Wood Processing Plant Operators
8173	Wood Products Machine Operators	8173	Wood Products Machine Operators
818	OTHER STATIONARY PLANT AND MACHINE OPERATORS	818	OTHER STATIONARY PLANT AND MACHINE OPERATORS
8181	Glass and Ceramics Plant Operators	8181	Glass and Ceramics Plant Operators
8182	Steam Engine and Boiler Operators	8182	Steam Engine and Boiler Operators
8183	Packing, Bottling and Labelling Machine Operators	8183	Packing, Bottling and Labelling Machine Operators
8184	Printing, Binding and Related Machine Operators	8184	Printing, Binding and Related Machine Operators
8185	Incineration Plant, Water Treatment and Related Machine Operators	8185	Water Treatment and Related Machine Operators
8186	Power Generating Plant Operators	8186	Power Generating Plant Operators
8187	Petroleum and Natural Gas Refining Plant Operators	8187	Petroleum and Natural Gas Refining Plant Operators
8188	Automated Assembly Line and Industrial Robot Operators	8188	Automated Assembly Line and Industrial Robot Operators
8189	Stationary Plant and Machine Operators Not Elsewhere Classified	8189	Stationary Plant and Machine Operators Not Elsewhere Classified



SSOC 2015		SSOC 2010	
82	ASSEMBLERS AND QUALITY CHECKERS	82	ASSEMBLERS AND QUALITY CHECKERS
820	SUPERVISORS AND GENERAL FOREMEN OF ASSEMBLERS AND QUALITY CHECKERS	820	SUPERVISORS AND GENERAL FOREMEN OF ASSEMBLERS AND QUALITY CHECKERS
8200	Supervisors and General Foremen of Assemblers and Quality Checkers	8200	Supervisors and General Foremen of Assemblers and Quality Checkers
821	ASSEMBLERS, QUALITY CHECKERS AND TESTERS	821	ASSEMBLERS, QUALITY CHECKERS AND TESTERS
8212	Electrical and Electronic Equipment Assemblers	8212	Electrical and Electronic Equipment Assemblers
8213	Quality Checkers and Testers	8213	Quality Checkers and Testers
8219	Assemblers Not Elsewhere Classified	8219	Assemblers Not Elsewhere Classified

SSOC 2015			SSOC 2010		
83	DRIVERS AND MOBILE MACHINERY OPERATORS		83	DRIVERS AND MOBILE MACHINERY OPERATORS	
830		MOBILE MACHINERY SUPERVISORS AND GENERAL FOREMEN	830		MOBILE MACHINERY SUPERVISORS AND GENERAL FOREMEN
	8300	Mobile Machinery Supervisors and General Foremen		8300	Mobile Machinery Supervisors and General Foremen
831		MRT TRAIN OPERATORS AND RELATED WORKERS	831		MRT TRAIN OPERATORS AND RELATED WORKERS
	8311	MRT Train Operators		8311	MRT Train Operators
	8312	Railway Brakers and Related Workers		8312	Railway Brakers and Related Workers
832		CAR AND LIGHT GOODS VEHICLE DRIVERS	832		CAR AND LIGHT GOODS VEHICLE DRIVERS
	8321	Motorcycle Delivery Men		8321	Motorcycle Delivery Men
	8322	Car, Taxi, Van and Light Goods Vehicle Drivers		8322	Car, Taxi and Van Drivers
				8329	Car and Light Goods Vehicle Drivers Not Elsewhere Classified
833		HEAVY TRUCK AND BUS DRIVERS	833		HEAVY TRUCK AND BUS DRIVERS
	8331	Bus and Tram Drivers		8331	Bus and Tram Drivers
	8332	Heavy Truck and Lorry Drivers		8332	Heavy Truck and Lorry Drivers
834		MOBILE MACHINERY OPERATORS	834		MOBILE MACHINERY OPERATORS
	8342	Earth Moving and Related Machinery Operators		8342	Earth Moving and Related Machinery Operators
	8343	Crane, Hoist and Related Equipment Operators		8343	Crane, Hoist and Related Equipment Operators
	8344	Lifting Truck Operators		8344	Lifting Truck Operators
	8349	Mobile Machinery Operators Not Elsewhere Classified		8349	Mobile Machinery Operators Not Elsewhere Classified
835		SHIPS' DECK CREW AND RELATED WORKERS	835		SHIPS' DECK CREW AND RELATED WORKERS
	8350	Ships' Deck Crew and Related Workers		8350	Ships' Deck Crew and Related Workers

**9 CLEANERS, LABOURERS AND RELATED WORKERS**

**9 CLEANERS, LABOURERS AND RELATED WORKERS**

SSOC 2015			SSOC 2010		
91	CLEANERS AND RELATED WORKERS		91	CLEANERS AND RELATED WORKERS	
910	9100	CLEANING SUPERVISORS Cleaning Supervisors	910	9100	CLEANING SUPERVISORS Cleaning Supervisors
911		CLEANERS AND HELPERS IN HOTELS, OFFICES AND OTHER ESTABLISHMENTS	911		CLEANERS AND HELPERS IN HOTELS, OFFICES AND OTHER ESTABLISHMENTS
	9112	Cleaners and Helpers in Hotels and Related Establishments		9112	Cleaners and Helpers in Hotels and Related Establishments
	9113	Cleaners in Offices		9113	Cleaners In Offices and Other Establishments
	9114	Cleaners in Industrial Establishments			
	9115	Cleaners in Food and Beverage Establishments			
	9116	Cleaners in Residential Areas			
	9117	Cleaners in Open Areas			
	9119	Cleaners in Other Establishments			
912		VEHICLE, WINDOW, LAUNDRY AND OTHER HAND CLEANING WORKERS	912		VEHICLE, WINDOW, LAUNDRY AND OTHER HAND CLEANING WORKERS
	9121	Hand Launderers and Pressers		9121	Hand Launderers and Pressers
	9122	Vehicle Cleaners		9122	Vehicle Cleaners
	9123	Window Cleaners		9123	Window Cleaners
	9129	Cleaning Workers Not Elsewhere Classified		9129	Cleaning Workers Not Elsewhere Classified
913		DOMESTIC HELPERS AND CLEANERS	913		DOMESTIC HELPERS AND CLEANERS
	9130	Domestic Helpers and Cleaners		9130	Domestic Helpers and Cleaners

SSOC 2015			SSOC 2010		
<b>92</b>	<b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b>		<b>92</b>	<b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b>	
921		AGRICULTURAL, FISHERY AND RELATED LABOURERS	921		AGRICULTURAL, FISHERY AND RELATED LABOURERS
	9214	Park and Garden Maintenance Workers		9214	Park and Garden Maintenance Workers
	9219	Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified		9219	Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified
<b>93</b>	<b>LABOURERS AND RELATED WORKERS</b>		<b>93</b>	<b>LABOURERS AND RELATED WORKERS</b>	
931		CONSTRUCTION LABOURERS AND RELATED WORKERS	931		CONSTRUCTION LABOURERS AND RELATED WORKERS
	9310	Civil Engineering and Building Construction Labourers		9310	Civil Engineering and Building Construction Labourers
932		MANUFACTURING LABOURERS AND RELATED WORKERS	932		MANUFACTURING LABOURERS AND RELATED WORKERS
	9320	Manufacturing Labourers and Related Workers		9320	Manufacturing Labourers and Related Workers
933		TRANSPORT AND STORAGE LABOURERS	933		TRANSPORT AND STORAGE LABOURERS
	9331	Hand and Pedal Vehicle Drivers		9331	Hand and Pedal Vehicle Drivers
	9333	Material and Freight Handling Workers		9333	Material and Freight Handling Workers
<b>94</b>	<b>FOOD PREPARATION AND KITCHEN ASSISTANTS</b>		<b>94</b>	<b>FOOD PREPARATION AND KITCHEN ASSISTANTS</b>	
941		FOOD PREPARATION AND KITCHEN ASSISTANTS	941		FOOD PREPARATION AND KITCHEN ASSISTANTS
	9410	Food Preparation and Kitchen Assistants		9410	Food Preparation and Kitchen Assistants

SSOC 2015		SSOC 2010	
<b>96</b>	<b>WASTE AND RECYCLABLES COLLECTION WORKERS AND OTHER ELEMENTARY WORKERS</b>	<b>96</b>	<b>REFUSE WORKERS AND OTHER ELEMENTARY WORKERS</b>
960	WASTE AND RECYCLABLES COLLECTION SUPERVISORS		
9600	Waste and Recyclables Collection Supervisors		
961	WASTE AND RECYCLABLES COLLECTION WORKERS	961	REFUSE WORKERS
9611	Waste and Recyclables Collection Workers	9611	Garbage and Recycling Collectors
		9613	Sweepers and Related Workers
962	PORTERS, ATTENDANTS AND RELATED WORKERS	962	PORTERS, ATTENDANTS AND RELATED WORKERS
9621	Porters and Related Workers	9621	Porters and Related Workers
9625	Attendants	9625	Attendants
9626	Watchmen and Related Workers	9626	Watchmen and Related Workers
9629	Other Elementary Workers	9629	Other Elementary Workers

**X WORKERS NOT ELSEWHERE CLASSIFIED**

**X WORKERS NOT CLASSIFIABLE BY OCCUPATION**

<b>SSOC 2015</b>		<b>SSOC 2010</b>	
X1000	Worker reporting unidentifiable or inadequately described occupation	X1000	Worker Reporting Unidentifiable or Inadequately Described Occupation
X2000	Worker not reporting any occupation	X2000	Worker Not Reporting Any Occupation
X3000	Singapore armed forces personnel	X3000	Singapore Armed Forces Personnel
X4000	Foreign armed forces personnel	X4000	Foreign Armed Forces Personnel
X5000	Foreign diplomatic personnel	X5000	Foreign Diplomatic Personnel

# Alphabetical Index

**A**

29011	Abbot	11140	Administrator of political party organisation
83502	Able seaman	11150	Administrator of professional association
73149	Abrasive wheel moulder	11150	Administrator of trade association
73149	Abrasive-coated cloth and paper maker	11150	Administrator of trade union
81819	Abrasives mixer	11150	Administrator of workers' organisation
73120	Accordion maker	14330	Administrator, arts
73120	Accordion tuner	25220	Administrator, computer systems
24111	Accountant (general)	25211	Administrator, database
33130	Accountant, assistant	11121	Administrator, government
24112	Accountant, audit	25220	Administrator, network
24111	Accountant, casino	34229	Adventure training instructor
24111	Accountant, chartered	71323	Advertisement painter (sign writing)
24111	Accountant, company	33222	Advertising accounts executive
24111	Accountant, cost	26413	Advertising copywriter
24111	Accountant, cost and works	21666	Advertising illustrator
24111	Accountant, public	12220	Advertising manager
24113	Accountant, tax	34310	Advertising photographer
72333	Accounting and calculating machine mechanic	33392	Advertising representative
44199	Accounting machine operator	33392	Advertising salesman
12111	Accounting manager (finance department)	33499	Adviser, careers
33130	Accounting officer	23611	Adviser, education methods
43119	Accounts analysis clerk	23611	Adviser, teaching methods
43112	Accounts assistant	24212	Advisory services, consultant, business
43112	Accounts clerk	26111	Advocate & Solicitor (practising)
43112	Accounts payable (or receivable) bookkeeper	26111	Advocate (practising)
40000	Accounts section supervisor	74221	Aerial erector (radio and television)
81872	Acetylene filler	34310	Aerial photographer
81314	Acetylene plant operator	83439	Aerial ropeway operator
73161	Acid polisher (glass decorating)	21659	Aerial surveyor
81139	Acidiser (oil and gas wells)	34404	Aerialist
71249	Acoustical insulator	34223	Aerobics instructor
21110	Acoustics physicist	21429	Aerodrome construction engineer
44110	Acquisitions clerk (library)	21110	Aerodynamicist
34403	Acrobat	73162	Aerographing decorator (ceramics)
26550	Actor	31182	Aeronautical draughtsman
26550	Actor, dramatic	31182	Aeronautical draughtsperson
26550	Actor, film	21445	Aeronautical engineer
21239	Actuarial officer	31152	Aeronautical engineering technician
21213	Actuary	72321	Aeronautical mechanic
22302	Acupuncturist	31152	Aerospace component repair technician
26120	Adjudicator	31155	Aerospace machining specialist
43122	Adjustment clerk (insurance)		
12112	Administration manager		
11150	Administrator of business association		
11150	Administrator of employers' organisation		
11150	Administrator of labour union		



61900	Afforestation worker	21447	Air-conditioning and refrigeration engineer
33222	After sales adviser	31154	Air-conditioning and refrigeration engineering technician
53113	After-school care centre worker	71243	Air-conditioning and refrigeration equipment insulator
13430	Aged care services manager	21447	Air-conditioning engineer
33311	Agent, clearing	31154	Air-conditioning engineering technician
33311	Agent, clearing and forwarding	54110	Aircraft accident fire-fighter
33330	Agent, employment	51112	Aircraft cabin attendant
33340	Agent, estate	91292	Aircraft cabin cleaner
33311	Agent, forwarding	21721	Aircraft captain (air transport)
33311	Agent, goods (railway)	91292	Aircraft cleaner
33340	Agent, house	21445	Aircraft designer
33211	Agent, insurance	74110	Aircraft electrician
33393	Agent, international market	72322	Aircraft engine fitter
33399	Agent, literary	72322	Aircraft engine fitter-assembler
24339	Agent, manufacturer's	72321	Aircraft engine mechanic
33232	Agent, procurement	51112	Aircraft hostess
33340	Agent, property	71152	Aircraft joiner
33232	Agent, purchasing	93333	Aircraft loader
33340	Agent, real estate	21721	Aircraft pilot (commercial airline)
33312	Agent, ship	21722	Aircraft pilot (except commercial airline and air force)
33311	Agent, shipping	71262	Aircraft pipe and tube fitter
33219	Agent, special (group insurance systems)	72139	Aircraft sheet metal worker
33399	Agent, sports	51112	Aircraft steward
33399	Agent, theatrical	75349	Aircraft upholsterer
21499	Agricultural engineer	83429	Air-drill operator (construction)
31199	Agricultural engineering technician	21721	Airline pilot
72339	Agricultural machinery fitter	42244	Airport hostess
72339	Agricultural machinery fitter-assembler	83324	Airport mobile equipment driver
72339	Agricultural machinery mechanic	42244	Airport reception clerk
83499	Agricultural machinery operator	42244	Airport receptionist
13101	Agriculture manager	31158	Airworthiness surveyor
21321	Agronomist	81314	Alcohol distiller
31429	Agronomy technician	81314	Alcohol stillman
31594	Air cargo officer	26524	Alto
51112	Air hostess (aircrew)	26524	Alto singer
42244	Air hostess (ground)	91301	Amah (general)
54121	Air marshal	11121	Ambassador (government)
21339	Air pollution analyst	X5000	Ambassador, foreign
31540	Air traffic controller	83224	Ambulance driver
13243	Air traffic operations manager	32591	Ambulance paramedic
43233	Air transport clerk	14322	Amusement park manager
31571	Air transport service supervisor	81890	Amusement ride operator
81419	Air-bag moulder (tyre making)	22141	Anaesthesiologist
81852	Air-compressor operator	22141	Anaesthetist
71272	Air-conditioning and refrigerating equipment installer	25140	Analyst programmer
71271	Air-conditioning and refrigerating equipment mechanic	24212	Analyst, business
		24131	Analyst, credit

24131	Analyst, equities	X4000	Armed forces (foreign)
24131	Analyst, financial	X3000	Armed forces (Singapore)
24231	Analyst, job	26532	Arranger, ballet
24312	Analyst, market research	26421	Art critic
24231	Analyst, occupational	26543	Art director
21212	Analyst, operations research	26212	Art gallery curator
24220	Analyst, policy	54123	Art gallery guard
24132	Analyst, risk (financial)	51139	Art gallery guide
24220	Analyst, scenario planning	14330	Art gallery manager
24312	Analyst, social media marketing	36202	Art instructor (extracurriculum)
26323	Analyst, social research	36202	Art teacher (private tuition)
25111	Analyst, systems	75390	Artificial flower maker
21342	Anatomist	61210	Artificial inseminator (livestock)
21345	Animal geneticist	61223	Artificial inseminator (poultry)
21313	Animal histologist	25190	Artificial intelligence engineer
51942	Animal keeper (zoo)	25190	Artificial intelligence specialist
22500	Animal pathologist	32141	Artificial limb fitter
21313	Animal physiologist	32142	Artificial limb maker
21345	Animal scientist	26512	Artist (painter)
21313	Animal taxonomist	21666	Artist, commercial
51942	Animal trainer (zoo)	26519	Artist, creative (glass and ceramics)
26542	Animation director		
21664	Animator	34323	Artist, display
81220	Annealer, metal	21666	Artist, fashion
26561	Announcer, radio	21661	Artist, graphic
26562	Announcer, television	21620	Artist, landscape
81246	Anodiser	21666	Artist, litho
74221	Antenna erector (radio and television)	21666	Artist, poster
		73162	Artist, pottery
26322	Anthropologist	26563	Artiste, dubbing
25140	Applications programmer	34404	Artiste, high-wire
75222	Applier, veneer	34404	Artiste, trapeze
33151	Appraiser	33399	Artistes agent
21327	Aquaculturist	26543	Artistic director
62212	Aquarium fish breeder	52419	Artist's model
62212	Aquarium fish farm worker	14330	Arts administrator
62212	Aquarium fish farmer	14330	Arts manager
51132	Aquarium guide	81142	Asbestos cement product making machine operator
26120	Arbitrator		
21322	Arboriculturist	81871	Asphalt blender
21322	Arborist	83425	Asphalt spreading machine operator
26339	Archaeologist		
29011	Archbishop	21462	Assayer
21610	Architect, building	74129	Assembler and installer, electric sign
25230	Architect, infrastructure (IT)		
21620	Architect, landscape	82123	Assembler, battery
21444	Architect, marine	73111	Assembler, chronometer
21444	Architect, naval	73111	Assembler, clock and watch
25230	Architect, network	82121	Assembler, electrical equipment
21610	Architect, urban design	82122	Assembler, electronic component
31185	Architectural draughtsman		
31185	Architectural draughtsperson	82122	Assembler, electronic equipment
34310	Architectural photographer		
26211	Archivist		

72139	Assembler, furniture (sheet metal)	35120	Assistant, computer systems analysis
82121	Assembler, industrial machinery (electrical)	94102	Assistant, hawkler (prepared food or drinks)
75364	Assembler, leather goods	44110	Assistant, library
82199	Assembler, metal products	33492	Assistant, operations liaison
82122	Assembler, microelectronics	41201	Assistant, personal
82121	Assembler, office machine (electrical)	41103	Assistant, personnel
82122	Assembler, office machine (electronic)	35219	Assistant, production
73119	Assembler, photographic equipment	52202	Assistant, shop
82199	Assembler, plastic products	94102	Assistant, stall (coffee shop)
71199	Assembler, prefabricated building section	94102	Assistant, stall (prepared food or drinks)
82122	Assembler, radio receiver	43141	Assistant, statistical (general)
82122	Assembler, radio valve	43219	Assistant, stores
82199	Assembler, rubber goods	32400	Assistant, veterinary
82122	Assembler, semi-conductor device	51910	Astrologer
82122	Assembler, television receiver	21110	Astrometrist
73111	Assembler, watch and clock	21110	Astronomer
33152	Assessor, insurance	21110	Astrophysicist
33152	Assessor, loss	34210	Athlete
24133	Asset allocator	34221	Athletic coach
33492	Asset securitisation executive	34229	Athletic trainer
33130	Assistant accountant	51112	Attendant, aircraft cabin
31005	Assistant chemical engineer	81821	Attendant, boiler
31001	Assistant civil engineer	96255	Attendant, bowling alley
51200	Assistant cook	96256	Attendant, bus
31002	Assistant electrical engineer	96254	Attendant, car park
31003	Assistant electronics engineer	96255	Attendant, cloakroom
31005	Assistant engineer (chemical)	96259	Attendant, crematorium
31001	Assistant engineer (civil)	51312	Attendant, dining car (railway)
31002	Assistant engineer (electrical)	73162	Attendant, dipping machine (ceramics decorating)
31003	Assistant engineer (electronic)	96255	Attendant, fairground
31006	Assistant engineer (manufacturing)	96255	Attendant, fun-fair
31004	Assistant engineer (mechanical)	96253	Attendant, hospital
31006	Assistant engineer (production)	96255	Attendant, hot-room (bath)
31001	Assistant engineer (structural)	96252	Attendant, laboratory
31006	Assistant manufacturing engineer	96257	Attendant, lavatory
31004	Assistant mechanical engineer	96251	Attendant, library
32200	Assistant nurse	96259	Attendant, lift
31006	Assistant production engineer	93335	Attendant, lorry
31001	Assistant structural engineer	96253	Attendant, mental hospital
43112	Assistant, accounts	96251	Attendant, office
43113	Assistant, audit	81675	Attendant, pasteuriser (malt liquor)
94102	Assistant, cafeteria	52491	Attendant, petrol pump (service station)
94102	Assistant, canteen	52491	Attendant, petrol service station
41101	Assistant, clerical	96257	Attendant, rest-room
94102	Assistant, coffee shop	81660	Attendant, saturation (sugar refining)
		96255	Attendant, sauna bath
		96259	Attendant, school

52491 Attendant, service station  
 (automobiles)  
 51112 Attendant, ship cabin  
 93209 Attendant, smokehouse  
 96255 Attendant, sports and recreation  
 96255 Attendant, swimming pool  
 26111 Attorney (practising)  
 43119 Auction clerk  
 33391 Auctioneer  
 74212 Audio and video equipment  
 mechanic  
 31143 Audio and video equipment  
 technician  
 21524 Audio equipment engineer  
 22661 Audiologist  
 32119 Audiometric technician  
 23612 Audio-visual aid specialist  
 (teaching)  
 33130 Audit (accounting) executive  
 24112 Audit accountant  
 43113 Audit assistant  
 43113 Audit clerk  
 24112 Auditor (accounting)  
 25152 Auditor, information technology  
 26411 Author  
 72133 Auto-body repairer  
 81312 Autoclave operator (chemical  
 and related processes)  
 81619 Autoclave operator (foodstuffs)  
 81252 Auto-lathe setter-operator  
 81880 Automated assembly-line  
 operator  
 81259 Automatic transfer machine  
 operator (metalworking)  
 31173 Automation designer  
 21413 Automation engineer  
 31174 Automation technician  
 72311 Automobile mechanic  
 71322 Automobile painter  
 71329 Automobile painter (motor  
 vehicle assembly)  
 71322 Automobile repair painter  
 75342 Automobile upholsterer  
 21446 Automotive engineer  
 31153 Automotive engineering  
 technician  
 22200 Auxiliary midwife  
 54142 Aviation security officer  
 75390 Awning maker (canvas)  
 81521 Axminster weaver

**B**

53111 Babysitter  
 81712 Back-end machine operator  
 (papermaking)  
 21349 Bacteriologist  
 31411 Bacteriology technician  
 81432 Bag making machine operator,  
 paper  
 81420 Bag making machine operator,  
 polythene  
 93333 Baggage handler  
 96213 Baggage porter (except hotel)  
 96212 Baggage porter, hotel  
 54199 Bailiff  
 81649 Baked goods products machine  
 operator  
 75121 Baker (general)  
 81641 Baker, biscuit  
 75122 Baker, bread  
 75123 Baker, pastry  
 81890 Bale press operator  
 81890 Baling machine operator, paper  
 26532 Ballet arranger  
 26531 Ballet dancer  
 21110 Ballistician  
 26531 Ballroom dancer  
 75299 Bamboo screen maker  
 81419 Banbury mixer operator  
 26523 Band leader  
 73120 Band wind instrument maker  
 (metal)  
 26523 Bandmaster  
 81721 Band-saw operator  
 81732 Band-sawyer (precision)  
 42111 Bank cashier  
 13460 Bank manager (branch)  
 43121 Bank operations clerk  
 42111 Bank teller  
 33492 Banking compliance executive  
 14121 Banquet manager (hotel)  
 72142 Bar bender (construction)  
 81233 Bar extruder operator (metal)  
 51330 Bar hostess  
 81215 Bar mill roller  
 51330 Bar/lounge hostess supervisor  
 51412 Barber  
 71151 Barge builder (wood)  
 31599 Barge superintendent  
 83509 Bargeman  
 51322 Barista  
 26524 Baritone  
 14123 Barkeeper (working proprietor)  
 51321 Barman

73119	Barometer maker	31411	Biochemistry technician
75229	Barrel maker	26411	Biographer
26111	Barrister (practising)	21343	Biological chemist
44170	Barrister's clerk	31411	Biological technician
51321	Bartender	21311	Biologist (general)
75291	Basket furniture maker	21319	Biologist, marine
75299	Basket maker	31411	Biology laboratory technician
75299	Basket weaver	21491	Biomedical engineer
26524	Bass singer	21220	Biometrician
81314	Batch still operator (chemical processes, except petroleum)	21349	Biophysicist
26512	Batik painter	21220	Biostatistician
73221	Batik printer	31411	Biotech laboratory technician
82123	Battery assembler	21329	Biotechnologist, plant
91170	Beach cleaner	51942	Bird keeper (bird park)
54150	Beach guard	54199	Bird sanctuary warden
81419	Bead builder (tyre making)	51942	Bird trainer
81691	Bean curd making machine operator	51132	Birdpark guide
81711	Beater operator (paper pulp)	81641	Biscuit baker
73139	Beater, gold	81641	Biscuit maker
72139	Beater, panel (aircraft)	81641	Biscuit making machine operator
72133	Beater, panel (vehicle)	81811	Biscuit placer (ceramics)
51421	Beautician	81811	Biscuit-kiln fireman (pottery and porcelain)
75349	Bedding maker	81811	Biscuit-kiln fireman (tile)
96211	Bell captain	29011	Bishop
96212	Bellboy	83425	Bituminous paving machine operator
71151	Bench carpenter	75190	Blachan maker
71152	Bench joiner	72211	Blacksmith (general)
72142	Bender and fixer, steel (reinforced concrete)	81659	Blancher (nuts)
72149	Bender and turner, ship frame	81211	Blast furnaceman (ore smelting)
72142	Bender, bar (construction)	81711	Bleacher operator (papermaking)
73159	Bender, glass tube	81319	Bleacher operator, chemical
72149	Bender, metal plate	81541	Bleacher, textile
72149	Bender, plate	81871	Blender (petroleum refining)
75229	Bender, wood	81871	Blender, asphalt
81431	Bending machine operator (paper box)	81677	Blender, coffee
81259	Bending press operator, metal	81871	Blender, ethyl (petroleum refining)
93339	Berthing man, dock	75390	Blender, fibre
75361	Bespoke shoemaker	81871	Blender, oil (petroleum refining)
51702	Betting clerk	81871	Blender, petroleum refining
73159	Beveller, glass	81677	Blender, tea
26229	Bibliographer	75190	Blender, tobacco
72339	Bicycle repairer	81679	Blender, wine
42141	Bill collector	81311	Blending machine operator (chemical and related processes)
71151	Billboard erector	81677	Blending machine operator, coffee
34221	Billiards instructor	81677	Blending machine operator, tea
34210	Billiards player	73221	Block printer
43115	Billing clerk		
96299	Billposter		
81842	Binder, book (machine)		
21343	Biochemist		

71120	Blocklayer	33510	Border inspector
26419	Blogger	81132	Borer, well (except oil and gas)
32120	Blood bank technician	81255	Boring machine operator (metalworking)
73151	Blower, glass	81739	Boring machine operator (woodworking)
73151	Blower, scientific glass	81255	Boring machine setter-operator (metalworking)
81819	Blowing machine operator, glass	81739	Boring machine setter-operator (woodworking)
14112	Boarding house keeper (working proprietor)	21312	Botanist
14111	Boarding house manager	21312	Botanist, soil
93331	Boat loader	81819	Bottle making machine operator
71151	Boatbuilder, wood	96299	Bottle sorter (hand)
83509	Boatman	81830	Bottle washing machine operator
83509	Boatman, ferry	93201	Bottler (hand)
83509	Boatman, motor	81830	Bottling machine operator
83502	Boatswain	54199	Bouncer
81599	Bobbin stripper	96255	Bowling alley attendant
72312	Body builder, coach	81431	Box making machine operator (paper box)
75229	Body builder, coach (wood)	93201	Boxer (hand packing)
72133	Body repairer, vehicle	34210	Boxer (professional sport)
54142	Bodyguard	81830	Boxing machine operator (packing)
81626	Boiler (sugar confectionery)	52302	Box-office cashier
71242	Boiler and pipe insulator	71290	Bracer (construction)
81821	Boiler attendant	32142	Bracer maker (orthopaedic)
81821	Boiler fireman	81599	Braid making machine operator
72132	Boilermaker	81841	Braille duplicating machine operator
72132	Boilermaking plater	73211	Braille machine operator (plate preparer)
81711	Boilerman (paper pulp making)	72311	Brake repairer
81860	Boilerman, power plant	83121	Brakeman, railway
72132	Boilersmith	83121	Brakeman, train
51999	Bomoh	81830	Branding machine operator, goods
43123	Bonds clerk	73120	Brass band musical instrument maker
24141	Bonds salesman	72121	Brazer
75119	Boner, meat	75122	Bread baker
32300	Bonesetter	62212	Breeder, aquarium fish
26421	Book critic	61221	Breeder, poultry
26416	Book editor	81673	Brewer
81843	Book embosser (machine)	21496	Brewery technologist
81843	Book embossing machine operator	81673	Brewmaster
21666	Book illustrator	81811	Brick and tile kilnman
44110	Book loan clerk	71120	Bricklayer
81842	Book sewing machine operator	71120	Bricklayer (construction)
81842	Bookbinding machine operator	71120	Bricklayer (firebrick)
42210	Booking clerk (travel agency)	71120	Bricklayer, kiln
52302	Booking office cashier	71120	Bricklayer, oven
43111	Bookkeeper		
43112	Bookkeeper, accounts payable (or receivable)		
43111	Bookkeeper, general ledger		
43112	Bookkeeping clerk		
44199	Bookkeeping machine operator		
51702	Bookmaker		
51702	Bookmaker's clerk		

---

21429	Bridge construction engineer	74110	Building electrician
83431	Bridge or gantry crane operator (non-port)	71332	Building exterior cleaner
83432	Bridge or gantry crane operator (port)	71250	Building glazier
81659	Briner (foodstuffs)	71241	Building insulator
21530	Broadcast engineer	74110	Building maintenance electrician
26421	Broadcast journalist	71331	Building maintenance handyman
35214	Broadcasting equipment operator (except sound recording)	31719	Building maintenance inspector
35211	Broadcasting operations technician	71331	Building maintenance man
24341	Broker, commodities	31719	Building maintenance supervisor
24144	Broker, commodities (financial)	71331	Building maintenance worker
24142	Broker, foreign exchange	71311	Building painter
33211	Broker, insurance	33593	Building permit licensing officer
24141	Broker, investment	71331	Building repairer
24142	Broker, money	12191	Building security manager
33399	Broker, printing	71332	Building structure cleaner
24141	Broker, securities	31123	Building technician
24342	Broker, ship	71192	Building wrecker
24141	Broker, stocks and shares	83422	Bulldozer operator
24341	Broker, trade	24341	Bunker trader
43123	Brokerage clerk	73162	Burnisher (ceramics decorating)
43122	Broker's clerk (insurance)	72241	Burnisher (metalworking)
75299	Broom maker	75361	Burnisher (shoemaking)
75299	Brush maker	96256	Bus attendant
71311	Brush painter (building)	51129	Bus conductor
73169	Brush painter (except construction)	83311	Bus driver
12111	Budget manager	31599	Bus station master
72241	Buffing and polishing machine operator	72311	Bus, motor, mechanic
71151	Builder, barge (wood)	24212	Business advisory services consultant
71151	Builder, boat (wood)	24212	Business analyst
72312	Builder, coach body	24212	Business consultant
75229	Builder, coach body (wood)	12212	Business development director
75361	Builder, heel (shoemaking)	33221	Business development executive
73120	Builder, organ	12212	Business development manager
81419	Builder, tyre	24212	Business efficiency expert
72312	Builder, vehicle body	72333	Business machine mechanic
75229	Builder, vehicle body (wood)	33593	Business permit licensing officer
72312	Builder, vehicle frame	51509	Butler
75229	Builder, vehicle frame (wood)	81623	Butter making machine operator
21610	Building architect	81420	Button maker (plastic)
96261	Building caretaker	33231	Buyer
21423	Building construction engineer	33231	Buyer, merchandise (wholesale or retail trade)
71000	Building construction general foreman	33232	Buyer, supply requirements
71000	Building construction supervisor and general foreman		
13232	Building contractor (working proprietor)		

**C**

83221	Cab driver
51112	Cabin attendant, aircraft
51112	Cabin attendant, ship

51112	Cabin steward, aircraft	51200	Canteen cook
51112	Cabin steward, ship	14123	Canteen keeper (working proprietor)
75221	Cabinet maker (furniture)	52422	Canvasser
72152	Cable and rope splicer (general)	52422	Canvasser, sales
83439	Cable car operator	81830	Capping and sealing machine operator
81131	Cable driller, (oil and gas wells)	51311	Captain (catering service)
74132	Cable jointer (electric cable)	51311	Captain waiter
74223	Cable jointer, telephone and telegraph	21721	Captain, aircraft (air transport)
74139	Cable layer, underground	31592	Captain, port
93100	Cable puller (cable laying)	51311	Captain, restaurant
72159	Cable railway rigger	21713	Captain, ship
74131	Cableman, electric power (overhead)	91220	Car cleaner
74139	Cableman, electric power (underground)	83229	Car delivery driver
74131	Cableman, electric traction (overhead)	83222	Car driver (private service)
74223	Cableman, telephone and telegraph	96254	Car park attendant
83509	Cable-ship hand	52309	Car park cashier
21652	Cadastral surveyor	31579	Car park supervisor
21529	CAD-CAM engineer	91220	Car polisher
96255	Caddie	91220	Car washer
96255	Caddie, golf	72311	Car, motor, mechanic
14123	Cafe keeper (working proprietor)	81719	Carbon coating machine operator (papermaking)
14121	Café manager	81660	Carbonation man (sugar refining)
94102	Cafeteria assistant	81314	Carbon-monoxide plant operator
51200	Cafeteria cook	75119	Carcass washer
52492	Cafeteria counter attendant	72249	Card grinder (textile)
14123	Cafeteria keeper (working proprietor)	81432	Cardboard lining machine operator
41109	Cage secretary	81432	Cardboard-press operator
52301	Cage supervisor	75390	Carder, fibre
81419	Calender operator, rubber	22121	Cardiologist
81549	Calender operator, textile	22132	Cardiothoracic surgeon
81549	Calenderer, cloth	33499	Career advisor
12242	Call centre manager	33499	Career coach
35214	Camera control operator (television broadcasting)	33499	Career consultant
35213	Camera operator, motion picture	96261	Caretaker, building
35213	Camera operator, television	93333	Cargo handler
35212	Camera operator, video	31594	Cargo officer, air
73119	Camera repairer	31574	Cargo superintendent, ship's
73215	Cameraman, photogravure	26513	Caricaturist
73219	Cameraman, xerography (offset printing)	71151	Carpenter (general)
51509	Camp supervisor	71151	Carpenter, bench
81319	Candle making machine operator	71151	Carpenter, construction
75291	Cane furniture maker	71151	Carpenter, maintenance
94102	Canteen assistant	71151	Carpenter, ship
		71151	Carpenter, stage and studio
		71151	Carpenter, theatre
		71290	Carpet layer
		75390	Carpet maker (hand knotting)
		75390	Carpet weaver (hand)



81521	Carpet weaving loom operator	81141	Caster, concrete product
21654	Cartographer, marine	73213	Caster, electrotype
31189	Cartographical draughtsman	81219	Caster, metal
31189	Cartographical draughtsperson	73141	Caster, pottery and porcelain
81431	Carton and paper box maker	73212	Caster, stereotype
26513	Cartoonist	81249	Casting finisher
26513	Cartoonist, motion picture	81420	Casting machine operator (plastic goods)
34399	Carver, ivory	73211	Casting machine operator (printing type)
71131	Carver, stone	81212	Casting machine operator, centrifugal
71131	Carver-setter, monument	81214	Casting machine operator, continuous
81739	Carving machine operator (woodworking)	81213	Casting machine operator, die
81739	Carving machine setter- operator (woodworking)	26229	Cataloguer
81220	Case hardener, metal	72149	Catcher, rivet
81139	Caser (oil and gas wells)	14122	Catering services manager
26351	Caseworker, child welfare	71312	Ceiling paperhanger
26356	Caseworker, family	26521	Cellist
26351	Caseworker, social welfare	81439	Cellophane bag making machine operator
52303	Cash accounting clerk	71143	Cement finisher
52302	Cash desk cashier	81312	Cement furnaceman
52302	Cashier (general)	71144	Cementer (oil and gas wells)
42111	Cashier, bank	81212	Centrifugal casting machine operator
52302	Cashier, booking office	81313	Centrifugal separator operator
52302	Cashier, box-office	81660	Centrifuge operator (sugar refining)
52309	Cashier, car park	73162	Ceramic decorator
52302	Cashier, cash desk	73162	Ceramic dipper
52303	Cashier, casino	73162	Ceramic enameller
52302	Cashier, check-out (self-service store)	81313	Ceramic filter operator
52303	Cashier, office	73162	Ceramic glazer
52302	Cashier, restaurant	81811	Ceramic kiln operator
52303	Cashier, retail	73162	Ceramic painter
52302	Cashier, store	73162	Ceramic spray painter
81139	Casing puller (oil and gas wells)	21495	Ceramics technologist
24111	Casino accountant	81649	Cereal processing machine operator
51702	Casino dealer	73139	Chain maker (precious metal)
41109	Casino operations administrator	14201	Chain store manager
41109	Casino operations administrator assistant	93100	Chainman (surveying)
14321	Casino operations manager	83439	Chair-lift operator
41109	Casino operations scheduling clerk	11122	Chairman (statutory board)
41109	Casino operations slot administrator	11201	Chairman, company
51701	Casino shift manager	91121	Chambermaid
51701	Casino shift supervisor	29011	Chaplain
51702	Casino shuffler	71000	Chargehand (construction)
35290	Casino surveillance technician	81219	Charger, furnace (metal melting and reheating)
75229	Cask maker	81211	Charger, furnace (ore smelting and refining)
81141	Cast concrete product making machine operator		
81149	Cast stone making machine operator		

81312	Char-kiln tender (chemical and related processes)	21130	Chemist, quality control
24111	Chartered accountant	21130	Chemist, rubber
24343	Charterer, ship	21130	Chemist, textiles
83222	Chauffeur, private motor car	31111	Chemistry technician
21725	Check pilot	81689	Cheroot making machine operator
91210	Checker (laundry service)	75299	Chick maker
82131	Checker, electrical products (quality assurance)	61221	Chicken farmer
82131	Checker, electronic products (quality assurance)	40000	Chief clerk (general office)
51390	Checker, food (catering service)	51200	Chief cook
82132	Checker, mechanical products (quality assurance)	26422	Chief editor (newspaper)
52302	Check-out cashier (self-service store)	21711	Chief engineer (ship)
34340	Chef	21711	Chief engineer officer (ship)
34340	Chef de cuisine (restaurant)	21711	Chief engineer, ship's
34340	Chef de partie (restaurant)	11201	Chief executive (company)
81319	Chemical bleacher operator	11122	Chief executive (statutory board)
21451	Chemical engineer (general)	13301	Chief information officer (IT)
21453	Chemical engineer (petrochemicals)	26120	Chief Justice
21452	Chemical engineer (petroleum)	31521	Chief officer (ship)
31005	Chemical engineer, assistant	11203	Chief operating officer
31161	Chemical engineering technician (general)	13301	Chief security officer (IT)
31162	Chemical engineering technician (natural gas)	51502	Chief steward (hotel)
31163	Chemical engineering technician (petrochemicals)	51111	Chief steward (ship)
31162	Chemical engineering technician (petroleum)	13301	Chief technology officer (IT)
31111	Chemical laboratory technician	53113	Child care assistant
81311	Chemical mixing machine operator	34129	Child care inspector
81314	Chemical reactor operator	13410	Child care services manager
81312	Chemicals cooker	36100	Child care teacher
81311	Chemicals crusher operator	53113	Child care worker
81311	Chemicals miller	53114	Child residential care assistant
81312	Chemicals roaster	26351	Child welfare caseworker
21130	Chemist (general)	75190	Chinese medicated wine maker
21343	Chemist, biological	22301	Chinese physician
21130	Chemist, detergents	22302	Chinese physician (acupuncturist)
21130	Chemist, dye	22301	Chinese sinseh
21130	Chemist, food	81711	Chipper, log (machine)
21130	Chemist, glass	32300	Chiropodist
21130	Chemist, leather	22692	Chiropractor
21130	Chemist, metallurgical	81319	Chlorine gas maker
21130	Chemist, paint	81314	Chlorine plant operator
21130	Chemist, petroleum	81625	Chocolate making machine operator
21130	Chemist, pharmaceutical	81625	Chocolate making press operator
21130	Chemist, plastics	26523	Choirmaster
21130	Chemist, polymers	26532	Choreographer
		26531	Chorus dancer
		26523	Chorus master
		73111	Chronometer assembler
		96261	Church janitor
		75190	Chutney maker
		81689	Cigar making machine operator

81689	Cigarette machine catcher	81660	Clarifier operator (sugar refining)
81681	Cigarette making machine operator	75390	Clarifier, textile fibre
35216	Cinema film projectionist	81679	Clarifier, wine
14323	Cinema manager	73149	Clay extruding press operator
35216	Cinema projectionist	81819	Clay fitter press operator
26543	Cinematographer	81819	Clay grinder
26543	Cinematography director	81819	Clay millman
81732	Circular sawyer (precision)	81819	Clay mixer
34401	Circus comic	91122	Cleaner (hotel)
21429	Civil engineer (aerodrome construction)	91140	Cleaner (industrial establishment)
21429	Civil engineer (bridge construction)	91292	Cleaner, aircraft
21423	Civil engineer (building construction)	91292	Cleaner, aircraft cabin
21429	Civil engineer (dock and harbour construction)	91170	Cleaner, beach
21429	Civil engineer (dredging)	71332	Cleaner, building exterior
21421	Civil engineer (general)	91220	Cleaner, bus
21429	Civil engineer (highway and street construction)	91220	Cleaner, car
21429	Civil engineer (hydraulics)	91210	Cleaner, carpet
21429	Civil engineer (hydrographic)	91160	Cleaner, conservancy
21424	Civil engineer (piling)	91170	Cleaner, drain
21429	Civil engineer (railway construction)	91170	Cleaner, expressway
21429	Civil engineer (road construction)	91140	Cleaner, factory
21432	Civil engineer (sanitary)	91151	Cleaner, food and beverage establishment
21432	Civil engineer (sewerage)	91151	Cleaner, food court
21424	Civil engineer (soil mechanics)	91151	Cleaner, hawkker centre
21429	Civil engineer (tunnel construction)	91190	Cleaner, hospitals
31001	Civil engineer, assistant	91122	Cleaner, hotel
71000	Civil engineering construction general foreman	91140	Cleaner, industrial establishment
71000	Civil engineering construction supervisor and general foreman	81248	Cleaner, metal
21421	Civil engineering consultant (general)	91220	Cleaner, motor vehicle
13232	Civil engineering contractor (working proprietor)	91190	Cleaner, MRT station
31184	Civil engineering draughtsman	91130	Cleaner, office
31184	Civil engineering draughtsperson	91170	Cleaner, open areas
31121	Civil engineering technician (general)	91170	Cleaner, park
11121	Civil service commissioner	91190	Cleaner, places of worship
71193	Cladding and curtain wall erector	91293	Cleaner, railway carriage
33152	Claims adjuster	91190	Cleaner, recreation centre
43122	Claims clerk, insurance	91160	Cleaner, residential area
33152	Claims inspector	91151	Cleaner, restaurant
		91190	Cleaner, school
		91291	Cleaner, ship
		91291	Cleaner, ship tank
		91190	Cleaner, shopping mall
		91190	Cleaner, sports complex
		81248	Cleaner, ultrasonic (metal)
		91170	Cleaner, waterways
		91230	Cleaner, window
		12199	Cleaning services manager
		91000	Cleaning supervisor
		91129	Clearer, table (catering service)
		33311	Clearing agent

33311	Clearing and forwarding agent	44170	Clerk, legal
43119	Clearing house clerk (banking)	44110	Clerk, library
41101	Clerical assistant	43221	Clerk, material planning
40000	Clerical supervisor (general)	43129	Clerk, mortgage
44170	Clerk of court	41101	Clerk, office (general)
31125	Clerk of works	43221	Clerk, order (material planning)
43112	Clerk, accounts	43239	Clerk, parcel (railway)
43119	Clerk, accounts analysis	43114	Clerk, payroll
44110	Clerk, acquisitions (library)	41103	Clerk, personnel
43122	Clerk, adjustment (insurance)	43221	Clerk, planning (materials supply)
43119	Clerk, auction	43222	Clerk, planning (production)
43113	Clerk, audit	43122	Clerk, policy (insurance)
43121	Clerk, bank operations	42112	Clerk, postal service counter
44170	Clerk, barrister's	44170	Clerk, probate
43115	Clerk, billing	43222	Clerk, production planning
43123	Clerk, bonds	43116	Clerk, purchasing
44110	Clerk, book loan	43219	Clerk, receiving and despatching
42210	Clerk, booking (travel agency)	41103	Clerk, records (personnel department)
43112	Clerk, bookkeeping	43211	Clerk, records (stock control)
43119	Clerk, bookmaker's	43119	Clerk, remittance
43123	Clerk, brokerage	42210	Clerk, reservations (travel agency)
43122	Clerk, broker's (insurance)	43239	Clerk, routing (freight)
52303	Clerk, cash accounting	41109	Clerk, safe deposit
40000	Clerk, chief (general office)	43114	Clerk, salaries
43119	Clerk, clearing house (banking)	43115	Clerk, sales
43149	Clerk, coding (data processing)	43221	Clerk, schedule (material planning)
43129	Clerk, collateral	43222	Clerk, schedule (production planning)
44170	Clerk, conveyancing	43123	Clerk, securities
43222	Clerk, co-ordinating (production planning)	43231	Clerk, shipping
41109	Clerk, correspondence	43231	Clerk, shipping (freight)
43119	Clerk, cost	44170	Clerk, solicitor's
43119	Clerk, cost computing	41103	Clerk, staff records
42112	Clerk, counter (post office)	43141	Clerk, statistical (general)
43129	Clerk, credit	43211	Clerk, stock control
43151	Clerk, data processing control	43211	Clerk, stock records
43219	Clerk, despatching and receiving	43212	Clerk, storeroom
42249	Clerk, enquiries	43212	Clerk, stores
41102	Clerk, filing	43212	Clerk, supply
43129	Clerk, finance	43219	Clerk, tally
43219	Clerk, freight receiving	43119	Clerk, tax
41101	Clerk, general office	52302	Clerk, ticket (booking office)
44110	Clerk, index (library)	42210	Clerk, ticketing (travel agency)
42249	Clerk, information	43149	Clerk, traffic
42249	Clerk, inquiries	43239	Clerk, traffic (freight)
43122	Clerk, insurance	42210	Clerk, travel agency
43211	Clerk, inventory (stock control)	42210	Clerk, travel reservations
43129	Clerk, investment	42210	Clerk, travel service
43115	Clerk, invoice	41312	Clerk, typing
43219	Clerk, inward freight		
44170	Clerk, judge's		
44170	Clerk, law		
43112	Clerk, ledger		

43114	Clerk, wages	81678	Cocoa grinding machine operator
43212	Clerk, warehouse	61900	Coconut farm worker
75361	Clicker cutter (shoemaking)	61900	Coconut farmer
75361	Clicking machine operator (shoemaking)	81653	Coconut oil miller
33222	Client account service executive	43149	Coder, statistical
21120	Climatologist	43149	Coding clerk (data processing)
96253	Clinic attendant	75151	Coffee and tea taster
42243	Clinic receptionist	81678	Coffee bean roasting machine operator
13420	Clinical director	81677	Coffee blender
22200	Clinical nurse	81677	Coffee blending machine operator
22146	Clinical pathologist	81678	Coffee grinding machine operator
26340	Clinical psychologist	51200	Coffee house cook
31413	Clinical research coordinator	94102	Coffee shop assistant
21347	Clinical research professional	14123	Coffee shop keeper (working proprietor)
81722	Clipping machine operator (veneer cutting)	75151	Coffee taster
96255	Cloakroom attendant	75229	Coffin maker
73111	Clock and watch assembler	72339	Coin machine repairer and servicer
73112	Clock and watch repairer	43129	Collateral clerk
75229	Clock case maker	81842	Collating machine operator (bookbinding)
75229	Clog maker	42149	Collection man (coin machines and meters)
81549	Cloth calenderer	42141	Collector, bill
81599	Cloth doubling and winding machine operator	42141	Collector, debt
75390	Cloth grader	96111	Collector, general waste
73149	Cloth maker, abrasive-coated	96113	Collector, greasy waste
81543	Cloth shrinker	43142	Collector, public opinion
81543	Cloth washer (textile making)	96111	Collector, recyclables
81521	Cloth weaver	42149	Collector, rent
81521	Cloth weaving loom operator	96255	Collector, ticket
21631	Clothes designer	42149	Collector, toll
34401	Clown	42149	Collector, turnstile
72312	Coach body builder	81320	Colour printer operator (photography)
75229	Coach body builder (wood)	26421	Columnist
83311	Coach driver	75390	Comber, fibre
34221	Coach, athletic	81719	Combiner operator (papermaking)
34221	Coach, games	34401	Comic, circus
34221	Coach, sports	21721	Commercial airline pilot
81149	Coal crusher operator	21666	Commercial artist
21469	Coal mining engineer	21666	Commercial illustrator
31199	Coal mining technician	12211	Commercial manager (manufacturing or mining company)
62220	Coastal waters fisherman	34310	Commercial photographer
81331	Coater, tablet	21632	Commercial products designer
81331	Coating machine operator (tablets and pills)		
81719	Coating machine operator, paper		
81419	Coating machine operator, rubber		
81243	Coating machine operator, wire		
75363	Cobbler		
81678	Cocoa bean roasting machine operator		

23109	Commercial school teacher (higher education)	81420	Compression moulding machine operator, plastics
24339	Commercial traveller	81852	Compressor operator (air)
26544	Commercials, director of	81852	Compressor operator (gas)
26544	Commercials, producer of	13301	Computer and information systems manager
11121	Commissioned police officer	74222	Computer and related equipment fitter
11121	Commissioner of inland revenue	74222	Computer and related equipment mechanic
11121	Commissioner, high (government)	35120	Computer database assistant
24341	Commodities broker	35120	Computer engineering assistant
24144	Commodities broker (financial)	21662	Computer games designer
24144	Commodities trader (financial)	25123	Computer games developer
24144	Commodities trading advisor	26541	Computer games producer
24144	Commodities trading advisor's representative	21522	Computer hardware engineer
24144	Commodity futures broker	35120	Computer helpdesk operator
24144	Commodity futures pool operator	35110	Computer high-speed printer operator
24144	Commodity futures pool operator's representative	35120	Computer network technician
14327	Community club manager	13303	Computer operations and network manager
34129	Community development worker	35110	Computer operator
32530	Community health aide	35110	Computer peripheral equipment operator
32530	Community health promoter	25140	Computer programmer
32530	Community health worker	35120	Computer programming assistant
34129	Community service worker	24331	Computer sales engineer
24111	Company accountant	24331	Computer sales representative
11201	Company chairman	25121	Computer software engineer
11202	Company director	25220	Computer systems administrator
22159	Company doctor	21522	Computer systems engineer
24231	Compensation and benefits specialist	35120	Computer systems technician
26562	Compere	36203	Computer teacher (computer training school)
26562	Compere, stage	35120	Computer technician
26562	Compere, television	26524	Concert singer
24132	Compliance analyst	96261	Concierge (apartment house)
24132	Compliance manager	96211	Concierge, hotel
24132	Compliance officer	33452	Conciliator, labour
26522	Composer	33452	Conciliator, labour management relations
26522	Composer, music	71149	Concrete curer
73211	Composing machine operator (linotype)	71143	Concrete finisher
71220	Composition tile layer	83425	Concrete finishing machine operator (road paving)
73211	Compositor	71142	Concrete form worker
81311	Compounder (chemical and related processes)	83325	Concrete mix truck driver
81871	Compounder (petroleum refining)	81144	Concrete mixer operator
81311	Compounder, resin (chemical and related processes)	81144	Concrete mixing plant operator
81419	Compounder, rubber	83425	Concrete paving machine operator

81141	Concrete product caster	33120	Consumer banking credit control executive
81145	Concrete pump operator	42246	Contact centre information clerk
72142	Concrete reinforcing iron worker	81890	Container filling machine operator (except compressed and liquefied gas)
71142	Concrete shutterer	83322	Container truck driver
83325	Concrete truck driver	26415	Continuity and script editor
71141	Concreter, reinforced (general)	26419	Continuity writer
81629	Condensed milk making machine operator	81219	Continuous casting machine operator
75190	Conditioner, leaf (tobacco)	81215	Continuous mill roller (steel)
26523	Conductor, band	81214	Continuous rod casting machine operator (non-ferrous metal)
51129	Conductor, bus	81314	Continuous still operator (chemical processes, except petroleum)
51129	Conductor, ferryboat	81660	Continuous sugar refining machine operator
51129	Conductor, hovercraft	34403	Contortionist
26523	Conductor, orchestra	13232	Contractor, building (working proprietor)
26523	Conductor, vocal group	13232	Contractor, civil engineering (working proprietor)
81626	Confectionery making machinery operator (sugar confectionery)	33330	Contractor, employment
75123	Confectionery mixer (flour)	33330	Contractor, labour
53112	Confinement nanny	13232	Contractor, renovation (working proprietor)
34402	Conjurer	13232	Contractor, road building (working proprietor)
91160	Conservancy cleaner	26524	Contralto
21339	Conservation officer	31540	Controller, air traffic
21339	Conservation scientist	12111	Controller, financial
26213	Conservator (art works)	31560	Controller, sea traffic
35110	Console operator (electronic data processing)	81871	Controlman (petroleum refining)
54121	Constable	33320	Convention co-ordinator
54121	Constable, police	33320	Convention organiser
71151	Construction carpenter	81314	Converter operator (chemical processes, except petroleum)
75402	Construction diver	34110	Conveyance executive
31129	Construction inspector	44170	Conveyancing clerk
71152	Construction joiner	83439	Conveyer operator
93100	Construction labourer	51200	Cook, cafeteria
72333	Construction machinery mechanic	51200	Cook, canteen
13231	Construction manager	51200	Cook, coffee house
72143	Constructional steel erector	51200	Cook, commis
X5000	Consul general, foreign	51200	Cook, hotel
X5000	Consular official, foreign	51200	Cook, pastry (restaurant)
24212	Consultant, business	51200	Cook, private service
24212	Consultant, business advisory services	51200	Cook, restaurant
24232	Consultant, executive search	51200	Cook, ship's
24231	Consultant, human resource	81312	Cooker (chemical and related processes)
25112	Consultant, IT business	81312	Cooker, chemicals
25112	Consultant, IT business process		
24211	Consultant, management		
24320	Consultant, public relation		
21498	Consultant, safety and security		
33492	Consumer banking branch operations and processing executive		

81673	Cooker, malt	21631	Costume designer (film)
81629	Cooler operator (dairy products)	21631	Costume designer (stage)
81855	Cooling plant operator	21631	Costume designer (studio)
75229	Cooper	26355	Counsellor, drugs and alcohol
43222	Co-ordinating clerk (production planning)	26356	Counsellor, family
33320	Co-ordinator, convention	26354	Counsellor, rehabilitation
33320	Co-ordinator, exhibition	26359	Counsellor, student vocational
43151	Co-ordinator, production (computer operations)	26359	Counsellor, vocational guidance
24331	Co-ordinator, technical sales	52301	Count supervisor
21721	Co-pilot	42112	Counter clerk, post office
81149	Copper floatation man	14327	Country club manager
72139	Coppersmith	83121	Coupler, yard (railway)
81653	Copra miller	51604	Courier (despatch)
61900	Copra producer (plantation)	51131	Courier (travel)
26413	Copywriter, advertising	51601	Courier service supervisor
26414	Copywriter, technical	26432	Court interpreter
72112	Core-blower operator	41202	Court reporter
81723	Core-laying machine operator (plywood manufacture)	83501	Coxswain, lifeboat
72112	Coremaker	36202	Crafts teacher (private tuition)
72112	Coremaker, tube	83431	Crane operator (bridge or gantry crane) (non-port)
61900	Corn farmer	83432	Crane operator (bridge or gantry crane) (port)
81630	Corn milling machine operator	83431	Crane operator (floating crane)
26120	Coroner	83431	Crane operator (locomotive crane)
33492	Corporate banking cash management executive	83431	Crane operator (mobile crane)
33120	Corporate banking credit control executive	83431	Crane operator (stationary jib-crane)
33492	Corporate banking structured & project financing executive	83431	Crane operator (tower crane)
33492	Corporate banking transactional services executive	93201	Crater (hand)
24320	Corporate communications officer	83431	Crawler crane operator
26112	Corporate counsel	83424	Crawler drill operator
33492	Corporate finance origination, structuring & advisory executive	81890	Crayon press machine operator
24334	Corporate finance sales & distribution executive	81431	Creasing and cutting press operator (paper box)
12130	Corporate planning manager	26519	Creative artist (glass and ceramics)
12112	Corporate services manager	24311	Creative director (advertising)
41109	Correspondence clerk	24131	Credit analyst
26421	Correspondent, newspaper	43129	Credit clerk
81719	Corrugating machine operator (papermaking)	33120	Credit officer
51421	Cosmetologist	96259	Crematorium attendant
24111	Cost accountant	93209	Crepe mill operator
24111	Cost and works accountant	81719	Creping machine operator (papermaking)
43119	Cost clerk	33454	Crewing officer (ship)
43119	Cost computing clerk	62220	Crewman, trawler
40000	Cost section supervisor	62220	Crewman, tuna boat
21631	Costume designer	62220	Crewman, whaler
		83509	Crewman, yacht
		26421	Crime reporter
		26321	Criminologist





26531	Dancer, ballroom	32143	Dental prosthesis maker and repairer
26531	Dancer, chorus	32511	Dental surgery assistant
36205	Dancing teacher (private tuition)	32511	Dental surgery assistant, school
81320	Darkroom man (black-and-white developing)	32143	Dental technician
81320	Darkroom man (colour developing)	32512	Dental therapist
81320	Darkroom man (photo printing)	22611	Dentist, general
25230	Data communication analyst	22612	Dentist, specialised
41320	Data entry clerk	42243	Dentist's receptionist
41320	Data entry operator	32143	Denturist
43151	Data processing control clerk	11121	Department head (government)
74222	Data processing equipment fitter	14201	Departmental store manager
25291	Data scientist	31599	Depot superintendent, railway
25211	Database administrator	31599	Depot superintendent, road transport
25212	Database architect	26119	Deputy Public Prosecutor
25212	Database designer	11121	Deputy secretary, (government)
51702	Dealer (gaming)	22122	Dermatologist
24142	Dealer, foreign exchange	72159	Derrick-boat operator
14203	Dealer, retail (working proprietor)	81131	Derrickman (oil and gas wells)
24141	Dealer, securities	21445	Designer, aircraft
13459	Dean (institution of higher learning)	31173	Designer, automation
42141	Debt collector	21631	Designer, clothes
31521	Deck officer, ship	21632	Designer, commercial product
83502	Deckhand	21662	Designer, computer games
73162	Decorator (ceramics)	21631	Designer, costume
73162	Decorator, aerographing (ceramics)	21631	Designer, costume (film)
73162	Decorator, freehand painting (ceramics)	21631	Designer, costume (stage)
34321	Decorator, interior	21631	Designer, costume (studio)
34324	Decorator, set (motion pictures)	25212	Designer, database
73162	Decorator, spray painting (ceramics)	21631	Designer, dress
73162	Decorator-painter, glass	21610	Designer, environmental
81133	Deep-boring machine operator	34323	Designer, exhibition
62220	Deep-sea fisherman	21631	Designer, fashion
62220	Deep-sea fishery worker	21632	Designer, furniture
81248	Degreaser (metal)	21662	Designer, games
81619	Dehydrator, foodstuffs	21631	Designer, garment
26352	Delinquency prevention social worker	21661	Designer, graphic
83210	Delivery man, motor-cycle	21632	Designer, industrial product
96291	Delivery man, newspaper	21529	Designer, integrated circuit
21220	Demographer	34321	Designer, interior
71192	Demolition worker	34321	Designer, interior decoration
32511	Dental assistant	21631	Designer, jewellery
32512	Dental hygienist	34322	Designer, landscape
73119	Dental instrument maker and repairer	21446	Designer, motor car
		21632	Designer, package
		26543	Designer, production (film)
		26543	Designer, production (stage)
		26543	Designer, production (studio)
		34324	Designer, scenery
		34324	Designer, stage set
		25111	Designer, systems (computer)
		21632	Designer, textile
		21666	Designer, typographical

34323	Designer, window display	73162	Dipping machine attendant (ceramics decorating)
81859	Desilting basin operator	81419	Dipping machine operator, rubber
51604	Despatch worker	81242	Dip-plater
43219	Despatching and receiving clerk	81841	Direct lithographic pressman
81871	Desulphurisation treater (petroleum refining)	73229	Direct lithographic transferrer
54191	Detective (private)	26544	Director of commercials
54191	Detective, house	13420	Director of nursing
54191	Detective, store	35219	Director of photography (motion picture)
21130	Detergents chemist	26542	Director, animation
25123	Developer, computer games	26543	Director, art
25123	Developer, multimedia	12212	Director, business development
81320	Developer, photograph	26543	Director, cinematography
81320	Developer, photographic film	11202	Director, company
81320	Developer, photographic print	11202	Director, executive (company)
25121	Developer, software	51931	Director, funeral
25122	Developer, web	12211	Director, international marketing
81320	Developer, x-ray film	26543	Director, lighting
81320	Developing machine operator (motion picture)	11201	Director, managing
91210	Dhoby	26542	Director, motion picture
22142	Diagnostic radiologist	26529	Director, music
73132	Diamond polisher, industrial	26523	Director, music (band)
73132	Diamond sawyer, industrial	26523	Director, music (choir)
72229	Diamond-pointed tool maker	26543	Director, music (concert)
81213	Die casting machine operator	26543	Director, music (film)
72229	Die finisher	26523	Director, music (orchestra)
72221	Die maker	26543	Director, music (radio)
81259	Die sinking machine operator (metalworking)	26543	Director, music (stage)
81259	Die sinking machine setter-operator (metalworking)	26543	Director, music (theatre)
72212	Die-press operator (forging)	26543	Director, music (TV)
73141	Die-presser, pottery and porcelain	26529	Director, musical programme
72339	Diesel engine mechanic (except motor vehicle)	26542	Director, radio
22651	Dietitian	26542	Director, stage
22651	Dietitian, sports	26542	Director, television
22651	Dietitian, therapeutic	26542	Director, theatrical
81711	Digester operator	11121	Director-general
93100	Digger, ditch	34129	Disability services worker
96299	Digger, grave	34405	Disc jockey
93100	Digger, trench	14325	Discotheque manager
51312	Dining car attendant (railway)	14201	Discount store manager
51312	Dining salon steward (ship)	91152	Dishwasher
11121	Diplomatic representative (government)	72339	Dispensing machine repairer and servicer
X5000	Diplomatic representative, foreign	32540	Dispensing optician
73162	Dipper (ceramics)	34323	Display artist
75212	Dipper (wood treating)	34324	Display decorator
81242	Dipper, tin	81314	Distillation operator (chemical processes, except petroleum)
81242	Dipper, zinc	81871	Distiller (petroleum refining)
		81314	Distiller, alcohol
		81314	Distiller, perfume
		81314	Distiller, turpentine

21512	Distribution engineer (electric power)	31184	Draughtsman, structural engineering
13241	Distribution manager	31189	Draughtsman, topographical
26120	District Court judge	31189	Draughtsman, ventilation systems
93100	Ditch digger	31181	Draughtsperson (general)
75402	Diver, construction	31182	Draughtsperson, aeronautical
21429	Dock and harbour construction engineer	31185	Draughtsperson, architectural
96269	Dock gateman	31189	Draughtsperson, cartographical
93331	Docker	31184	Draughtsperson, civil engineering
31591	Dockmaster, dry dock	31183	Draughtsperson, electrical
22110	Doctor (general medical practice)	31183	Draughtsperson, electronics
22159	Doctor (specialised medical practice)	31189	Draughtsperson, geological
22159	Doctor, company	31189	Draughtsperson, heating systems
42243	Doctor's receptionist	31182	Draughtsperson, jig, tool and die
51945	Dog trainer	31186	Draughtsperson, marine
82191	Doll and stuffed toy maker	31186	Draughtsperson, marine engineering
91301	Domestic worker	31182	Draughtsperson, mechanical
71290	Door installer	31184	Draughtsperson, structural engineering
96262	Doorman	31189	Draughtsperson, topographical
52422	Door-to-door salesman	31189	Draughtsperson, ventilation systems
51503	Dormitory supervisor	83431	Drawbridge operator
81512	Doubler, thread and yarn	73159	Drawer, glass tube
81512	Doubling machine operator (thread and yarn)	81232	Drawer, pipe (seamless)
75122	Dough maker (bread)	81232	Drawer, seamless pipe and tube
75122	Dough mixer (bread)	81232	Drawer, tube (seamless)
83421	Dragline bucket operator	81231	Drawer, wire
91170	Drain cleaner	81819	Drawing machine operator, glass
71263	Drain layer	83423	Dredge operator
26421	Drama critic	83509	Dredger crewman
36206	Drama instructor (extracurriculum)	21429	Dredging engineer
36206	Drama teacher (private tuition)	21631	Dress designer
26550	Dramatic actor	36202	Dress making teacher (other than vocational school)
26411	Dramatist	75119	Dresser, meat (general)
31181	Draughtsman (general)	75119	Dresser, poultry
31182	Draughtsman, aeronautical	81630	Dresser, seed (mustard milling)
31185	Draughtsman, architectural	75119	Dresser, tripe
31189	Draughtsman, cartographical	51419	Dresser, wig
31184	Draughtsman, civil engineering	75310	Dressmaker
31183	Draughtsman, electrical	81312	Drier operator (chemical and related processes)
31183	Draughtsman, electronics	81629	Drier operator (dairy products)
31189	Draughtsman, geological	81619	Drier operator (foodstuffs)
31189	Draughtsman, heating systems	75211	Drier, kiln (wood)
31189	Draughtsman, interior design	81549	Drier, textile
31182	Draughtsman, jig, tool and die		
31186	Draughtsman, marine		
31186	Draughtsman, marine engineering		
31182	Draughtsman, mechanical		
26119	Draughtsman, parliamentary		

81132	Driller and borer, well (except oil and gas wells)	83129	Driver, shunting-engine
81131	Driller, cable (oil and gas wells)	83425	Driver, steam roller
73159	Driller, glass	83329	Driver, tanker
81139	Driller, jackhammer (mine and quarry)	83425	Driver, tar spreading machine
73149	Driller, pottery	83221	Driver, taxi
73139	Driller, precious metal	83322	Driver, trailer truck
81131	Driller, rotary (oil and gas wells)	83110	Driver, train
71131	Driller, stone	83421	Driver, trench digging machine
81132	Driller, well (except oil and gas)	93310	Driver, tricycle (not motorised)
81132	Driller, well (water well)	83321	Driver, truck
83424	Drilling machine operator	83223	Driver, van
81255	Drilling machine operator (metalworking)	83329	Driver, water-tank
81139	Drilling machine operator (mine and quarry)	51950	Driving instructor
81255	Drilling machine setter-operator (metalworking)	51950	Driving tester
94102	Drinks stall assistant	72212	Drop forger
83324	Driver, airport mobile equipment	72219	Drop-hammer operator
83224	Driver, ambulance	22621	Druggist
83422	Driver, bulldozer	73120	Drum maker
83311	Driver, bus	26521	Drummer
83221	Driver, cab	81591	Dry cleaning machine operator
83222	Driver, car (private service)	31591	Dry dock master
83229	Driver, car delivery	31591	Dry dock port master
83311	Driver, coach	75211	Dry kiln operator
83325	Driver, concrete mix truck	71230	Dry wall installer
83425	Driver, concrete paving machine	75190	Dryer (tobacco)
83322	Driver, container truck	81591	Drying tumbler operator
83429	Driver, dumper	81811	Dry-kiln operator (brick and tile)
83421	Driver, excavating machine	81811	Dry-kiln operator (pottery and porcelain)
83323	Driver, fire engine	26563	Dubbing artiste
72219	Driver, forge hammer	35219	Dubbing machine operator
83326	Driver, hooklift trucks with roll-on container	61221	Duck farmer
83449	Driver, lifting truck	83429	Dumper driver
83321	Driver, lorry	81841	Duplicating machine operator
83223	Driver, mail van	81841	Duplicating machine operator, braille
83491	Driver, mechanical sweeper	21130	Dye chemist
34210	Driver, motor-racing	81542	Dyeing machine operator (garments)
83210	Driver, motor-tricycle (goods)	81542	Dyeing machine operator (textile)
83110	Driver, MRT train	81542	Dyeing machine operator (thread and yarn)
93310	Driver, pedal vehicle	75390	Dyer and stainer, leather
83229	Driver, pick-up	81542	Dyer, fabric
83223	Driver, postal van	81542	Dyer, garment
83322	Driver, prime mover	81542	Dyer, hosiery
83322	Driver, prime mover (port)	81542	Dyer, knitwear
83129	Driver, railway engine	75390	Dyer, leather
83326	Driver, refuse truck	75390	Dyer, pelt
83425	Driver, road grader and scraper	81542	Dyer, textile fibre
83425	Driver, road roller	81542	Dyer, yarn
		74129	Dynamo fitter

**E**

22148	Ear, nose, throat (ENT) specialist	74129	Electric motor fitter
23624	Early intervention programme for infants and children teacher	74139	Electric power cableman (underground)
83426	Earth boring machine operator (construction)	21512	Electric power engineer
72339	Earth moving equipment fitter-assembler	74131	Electric power lineman
72333	Earth moving equipment mechanic	74139	Electric power lineman (underground)
72339	Earth-moving equipment fitter	74129	Electric sign assembler and installer
21332	Ecologist	74131	Electric traction lineman
26310	Econometrician	82121	Electrical component assembler
21220	Economics statistician	74129	Electrical control apparatus fitter
26310	Economist (general)	31183	Electrical draughtsman
26310	Economist (specialised)	31183	Electrical draughtsperson
29090	Economist, home	74122	Electrical elevator and related equipment fitter
81729	Edge gluer (veneer sheets)	21511	Electrical engineer (general)
73159	Edge grinder, glass	21512	Electrical engineer (power distribution and transmission)
72242	Edge tool sharpener	21512	Electrical engineer (power generation)
75361	Edge trimmer (shoe finishing)	31002	Electrical engineer, assistant
26416	Editor, book	31131	Electrical engineering technician (general)
26422	Editor, chief (newspaper)	31132	Electrical engineering technician (high voltage)
26415	Editor, continuity and script	82121	Electrical equipment assembler
26422	Editor, fashion	74121	Electrical fitter (general)
26422	Editor, feature	74129	Electrical fitter (household appliance)
26422	Editor, financial	74129	Electrical fitter (office machinery)
26422	Editor, foreign	74129	Electrical fitter (refrigeration and air-conditioning equipment)
26422	Editor, news (newspaper)	74129	Electrical fitter (signalling system)
26422	Editor, news (periodical)	74129	Electrical fitter (transformer)
26422	Editor, newspaper	74129	Electrical household appliance fitter
26422	Editor, periodical	74123	Electrical household appliance mechanic
26422	Editor, press	74123	Electrical household appliance repairer
26545	Editor, radio	74129	Electrical instrument fitter
26545	Editor, radio, television and video	74122	Electrical lift fitter
26415	Editor, script	74129	Electrical motor and generator fitter
35219	Editor, sound (motion picture film)	74129	Electrical office machinery fitter
26422	Editor, sports	82131	Electrical products checker (quality assurance)
26545	Editor, television	82131	Electrical products quality checker
26545	Editor, video	82131	Electrical products tester
26422	Editor-in-chief, newspaper		
23611	Education methods adviser		
21220	Education statistician		
23611	Educational assessment specialist		
26340	Educational psychologist		
24212	Efficiency expert, business		
61221	Egg producer (farm)		
74132	Electric cable jointer		
81390	Electric cell man		

74129	Electrical refrigeration and air-conditioning equipment fitter	74219	Electronic industrial equipment fitter
74123	Electrical repairer (household appliance)	74219	Electronic instrument fitter
74129	Electrical signalling systems fitter	74219	Electronic medical equipment fitter
81860	Electrical switchboard operator (power station)	74219	Electronic meteorological equipment fitter
74129	Electrical switchgear and control apparatus fitter	31195	Electronic pre-press technician
74129	Electrical transformer fitter	82131	Electronic products checker (quality assurance)
74123	Electrician (household electrical equipment)	82131	Electronic products quality checker
74110	Electrician, aircraft	82131	Electronic products tester
74110	Electrician, building	74211	Electronic prototype fitter
74110	Electrician, building maintenance	74221	Electronic signalling systems fitter
74110	Electrician, installation (building)	31183	Electronics draughtsman
74110	Electrician, locomotive	31183	Electronics draughtsperson
74110	Electrician, maintenance (building)	21521	Electronics engineer (general)
74110	Electrician, motor vehicle	31003	Electronics engineer, assistant
74129	Electrician, neon-lighting	31141	Electronics engineering technician (general)
74110	Electrician, ship	74211	Electronics fitter (general)
74110	Electrician, stage and studio	74219	Electronics fitter (industrial equipment)
74110	Electrician, theatre	74219	Electronics fitter (instruments)
74110	Electrician, train	74219	Electronics fitter (medical equipment)
74110	Electrician, vehicle	74219	Electronics fitter (meteorological equipment)
81860	Electricity generating plant operator (steam)	74221	Electronics fitter (radio, television and radar equipment)
81860	Electricity generating switchboard operator	21110	Electronics physicist
81860	Electricity generating turbine operator	81241	Electroplater
81860	Electricity generator operator (private installation)	32559	Electrotherapist
21110	Electricity physicist	73213	Electrotype caster
13291	Electricity power plant manager	73213	Electrotype moulder
32119	Electrocardiograph technician	73213	Electrotyper
81312	Electrode baking furnaceman	51942	Elephant trainer
32119	Electroencephalograph technician	21513	Elevator engineer
82122	Electronic component assembler	74122	Elevator fitter (electrical)
74222	Electronic computer and related equipment fitter	83439	Elevator operator (material-handling)
35110	Electronic computer operator (mainframe)	73211	Elrod casting machine operator (printing)
13304	Electronic data processing manager	51932	Embalmer
35110	Electronic data processing supervisor	21526	Embedded systems engineer
82122	Electronic equipment assembler	81843	Embossing machine operator, book
		81843	Embossing machine operator, book
		81439	Embossing machine operator, paper
		81419	Embossing machine operator, rubber

75390	Embroiderer, hand	21512	Engineer, distribution (electric power)
81532	Embroiderer, machine	21429	Engineer, dock and harbour construction
81531	Embroidering machine operator	21429	Engineer, dredging
22143	Emergency physician	21511	Engineer, electrical (general)
72249	Emery polisher (metalworking)	21512	Engineer, electrical (power distribution and transmission)
33330	Employment agent	21512	Engineer, electrical (power generation)
33330	Employment contractor	21521	Engineer, electronics (general)
24231	Employment counsellor	21513	Engineer, elevator
81629	Emulsifier (dairy products)	21526	Engineer, embedded systems
73162	Enameller, ceramic	21431	Engineer, environmental
73162	Enameller, glass	21724	Engineer, flight
73139	Enameller, jewellery	21461	Engineer, gas (production and distribution)
22129	Endocrinologist	21461	Engineer, gas (well drilling)
21333	Energy manager	21449	Engineer, gas turbine
83129	Engine driver, railway	21522	Engineer, hardware (computer)
81252	Engine setter-operator (metalworking)	21429	Engineer, highway and street construction
72311	Engine tuner	21429	Engineer, hydraulics
21711	Engineer officer, chief (ship)	21429	Engineer, hydrographic
21429	Engineer, aerodrome construction	21442	Engineer, industrial machinery and tools
21445	Engineer, aeronautical	25230	Engineer, infrastructure (IT)
21499	Engineer, agricultural	21525	Engineer, instrumentation
21447	Engineer, air-conditioning	21499	Engineer, intellectual property
25190	Engineer, artificial intelligence	21449	Engineer, internal combustion motor
31005	Engineer, assistant (chemical)	21449	Engineer, jet motor
31001	Engineer, assistant (civil)	21513	Engineer, lift
31002	Engineer, assistant (electrical)	21449	Engineer, locomotive (steam)
31003	Engineer, assistant (electronic)	21442	Engineer, machinery and tools (industrial)
31006	Engineer, assistant (manufacturing)	21411	Engineer, manufacturing (general)
31004	Engineer, assistant (mechanical)	21443	Engineer, marine (shore-based)
31006	Engineer, assistant (production)	21492	Engineer, materials
31001	Engineer, assistant (structural)	21445	Engineer, mechanical (aeronautical)
21524	Engineer, audio equipment	21446	Engineer, mechanical (automotive)
21413	Engineer, automation	21441	Engineer, mechanical (general)
21446	Engineer, automotive	21447	Engineer, mechanical (heating, ventilation and refrigeration)
21491	Engineer, biomedical	21442	Engineer, mechanical (industrial machinery and tools)
21429	Engineer, bridge construction	21443	Engineer, mechanical (marine)
21530	Engineer, broadcast	21449	Engineer, mechanical (motors and engines, except marine)
21423	Engineer, building construction	21469	Engineer, metal-mining
21529	Engineer, CAD-CAM	21419	Engineer, methods
21451	Engineer, chemical (general)		
21453	Engineer, chemical (petrochemicals)		
21452	Engineer, chemical (petroleum)		
21711	Engineer, chief (ship)		
21421	Engineer, civil (general)		
21469	Engineer, coal mining		
21522	Engineer, computer hardware		
25121	Engineer, computer software		
21522	Engineer, computer systems		



21469	Engineer, mining (coal)	21419	Engineer, work study
21469	Engineer, mining (metal)	13291	Engineering manager
21461	Engineer, mining (petroleum and natural gas)	31510	Engineering officer, first (ship)
21419	Engineer, motion study	31510	Engineering officer, marine
25230	Engineer, network	31510	Engineering officer, second (ship)
21469	Engineer, non-metalliferous mining	31510	Engineering officer, ship
21419	Engineer, organisation and methods	31510	Engineering officer, third (ship)
21453	Engineer, petrochemicals	24331	Engineering salesman
21461	Engineer, petroleum and natural gas	81252	Engine-lathe operator (metalworking)
21452	Engineer, petroleum refining	72339	Engine-room mechanic (ship)
21424	Engineer, piling	81829	Engine-room rating, ship's
21512	Engineer, power distribution and transmission	73161	Engraver, glass
21512	Engineer, power generation	73134	Engraver, jewellery
21499	Engineer, procurement	73219	Engraver, metal printing roller
21412	Engineer, production	73219	Engraver, music printing
21414	Engineer, quality assurance	73214	Engraver, photogravure
21414	Engineer, quality control	73219	Engraver, printing (metal plate, roller and die)
21529	Engineer, radar	73217	Engraver, printing (photogravure)
21524	Engineer, radio	73219	Engraver, printing roller
21429	Engineer, railway construction	73219	Engraving pantograph operator
21447	Engineer, refrigeration	42249	Enquiries clerk
21429	Engineer, road construction	32200	Enrolled nurse
21449	Engineer, robotics	25113	Enterprise architect
21493	Engineer, safety (industrial)	21313	Entomologist
21432	Engineer, sanitary	43142	Enumerator
21523	Engineer, semi-conductor	81432	Envelope and paper bag maker
21432	Engineer, sewerage	21431	Environment engineer
21444	Engineer, ship construction	32571	Environmental health inspector
21519	Engineer, signal systems (electrical)	21331	Environmental officer (environmental protection)
21529	Engineer, signal systems (electronic)	22632	Environmental officer (environmental public health)
25121	Engineer, software	22500	Epidemiologist, veterinary
21424	Engineer, soil mechanics	24131	Equities analyst
21423	Engineer, structural (buildings)	72335	Erector and installer, machinery
21422	Engineer, structural (general)	74221	Erector, aerial (radio and television)
21522	Engineer, systems (computer)	74221	Erector, antenna (radio and television)
21530	Engineer, telecommunications	71151	Erector, billboard
21530	Engineer, telephone	71193	Erector, cladding wall
21524	Engineer, television	72143	Erector, constructional steel
21442	Engineer, tools and industrial machinery	71193	Erector, curtain wall
21519	Engineer, traction (electric power)	75229	Erector, exhibition stand
21649	Engineer, traffic	71199	Erector, prefabricated building section
21512	Engineer, transmission (electric power)	71272	Erector, refrigeration equipment
21429	Engineer, tunnel construction	72144	Erector, ship beam and frame
21524	Engineer, video equipment	72143	Erector, structural steel
		93100	Erector, tent



61221	Farmer (battery poultryman)	61900	Feller (logging)
61900	Farmer (copra)	75390	Fellmonger
61221	Farmer (egg producer)	72142	Fencing worker
61900	Farmer (general)	81674	Fermenting room man
61900	Farmer (mixed farming)	83509	Ferry boatman
61132	Farmer (nursery)	31599	Ferry superintendent
61222	Farmer (poultry hatcher and breeder)	51129	Ferryboat conductor
61900	Farmer (spice grower)	75390	Fibre blender
62212	Farmer, aquarium fish	75390	Fibre carder
61221	Farmer, chicken	75390	Fibre comber
61900	Farmer, coconut	81542	Fibre dyer (textile)
61900	Farmer, corn	75390	Fibre grader and classer
62213	Farmer, crocodile	81315	Fibre maker (synthetic)
61210	Farmer, dairy	75390	Fibre mixer and blender
61221	Farmer, duck	75390	Fibre preparer
62211	Farmer, fish	75390	Fibre rover
61131	Farmer, flower	75390	Fibre scourer, wool
61900	Farmer, fruit	81812	Fibreglass maker
61221	Farmer, goose	81142	Fibro-cement product making machine operator
61900	Farmer, grain	35120	Field engineer, information technology (IT)
61900	Farmer, groundnut	43142	Field investigator (statistical)
61210	Farmer, livestock	40000	Field supervisor (market research)
61900	Farmer, maize	40000	Field supervisor (statistical)
61112	Farmer, mushroom	41102	Filing clerk
61900	Farmer, nut	81872	Filler, liquefied petroleum gas (LPG)
61131	Farmer, orchid	81872	Filler, oxygen
61221	Farmer, poultry	26550	Film actor
62211	Farmer, prawn	81320	Film and photographic paper maker
61900	Farmer, rice	26421	Film critic
61900	Farmer, rubber	81320	Film developer, photographic
61900	Farmer, soya bean	81320	Film drying machine operator (motion picture)
61900	Farmer, sugar-cane	81320	Film maker, photographic
61900	Farmer, tobacco	81854	Film operator (water works)
62212	Farmer, tropical fish	81320	Film printer
61221	Farmer, turkey	35216	Film projectionist, cinema
61119	Farmer, vegetable	81313	Filter press operator
31423	Farming technician (livestock and fisheries)	81819	Filter press operator, clay
31423	Farming technician (pets)	81313	Filterer, rotary drum
21631	Fashion and garment designer	43129	Finance clerk
21666	Fashion artist	12111	Finance manager
26422	Fashion editor	21220	Finance statistician
52411	Fashion model	24120	Financial adviser
34310	Fashion photographer	33219	Financial adviser (insurance)
26421	Fashion reporter	24131	Financial analyst
34399	Fashion stylist	13460	Financial and insurance services manager
52492	Fast food counter attendant	12111	Financial controller
94103	Fast food preparer	26422	Financial editor
14121	Fast food restaurant manager		
26422	Feature editor		
26421	Feature writer		
81693	Feed mixing machine operator		
81841	Feeder, printing press		

24143	Financial futures broker	31510	First engineering officer (ship)
24143	Financial futures dealer	31521	First mate (ship)
13460	Financial institution branch manager	62212	Fish breeder, aquarium
33492	Financial marketing processing and settlement executive	75119	Fish curer
33492	Financial markets product control executive	62211	Fish farm worker
33211	Financial planner	62212	Fish farm worker, aquarium
24139	Financial product structurer	62212	Fish farm worker, tropical
24334	Financial products institutional sales representative	62211	Fish farmer
72249	Finisher (metal polishing)	62211	Fish hatchery worker
81249	Finisher, casting	62212	Fish hatchery worker (aquarium)
71143	Finisher, cement	81694	Fish meal making machine operator
71143	Finisher, concrete	81619	Fish processing machine operator
72229	Finisher, die	75119	Fish smoker
75390	Finisher, pelt	62220	Fisherman, deep-sea
73219	Finisher, photo-engraving	62220	Fisherman, inland and coastal waters
73219	Finisher, plastic (photo-engraving)	62220	Fisherman, kelong
73219	Finisher, plate (photo-engraving)	13101	Fishery manager
75361	Finisher, shoe	62220	Fishery worker, deep-sea
75222	Finisher, wooden furniture	51132	Fishing guide
31711	Fire and safety inspector	81599	Fishing net maker
31711	Fire and safety officer	81139	Fishing-tool operator (oil and gas wells)
83323	Fire engine driver	34223	Fitness instructor
54110	Fire fighter (general)	72339	Fitter, agricultural machinery
54110	Fire fighter, aircraft accident	72322	Fitter, aircraft engine
54110	Fire fighter, harbour	71262	Fitter, aircraft pipe and tube
54110	Fire investigator	32141	Fitter, artificial limb
31711	Fire prevention specialist	74222	Fitter, computer and related equipment
31711	Fire safety manager	74222	Fitter, data processing equipment
54110	Fire salvage specialist	74129	Fitter, dynamo
71120	Firebrick layer	72339	Fitter, earthmoving equipment
54110	Fireman (aerodrome)	74129	Fitter, electric motor
81312	Fireman (chemical and related processes)	74121	Fitter, electrical (general)
54110	Fireman (fire brigade)	74129	Fitter, electrical (household appliance)
81811	Fireman, biscuit-kiln (pottery and porcelain)	74129	Fitter, electrical (office machinery)
81811	Fireman, biscuit-kiln (tile)	74129	Fitter, electrical (refrigeration and air-conditioning equipment)
81821	Fireman, boiler	74129	Fitter, electrical (signalling systems)
81811	Fireman, brick and tile oven	74129	Fitter, electrical (transformer)
81811	Fireman, glost-kiln (pottery and porcelain)	74129	Fitter, electrical control apparatus
81811	Fireman, glost-kiln (tile)	74122	Fitter, electrical elevator and related equipment
81829	Fireman, locomotive	74129	Fitter, electrical household appliance
81672	Fireman, malt		
81811	Fireman, pottery oven		
81829	Fireman, railway steam engine		
81822	Fireman, ship's		
81821	Fireman, steam boiler		

74129	Fitter, electrical instrument	74129	Fitter, rheostat
74122	Fitter, electrical lift	74129	Fitter, signalling equipment (electrical)
74129	Fitter, electrical motor and generator	74221	Fitter, signalling equipment (electronic)
74129	Fitter, electrical office machinery	75361	Fitter, sole
74129	Fitter, electrical refrigeration and air-conditioning equipment	74129	Fitter, switchgear (electrical)
74129	Fitter, electrical signalling systems	74221	Fitter, television transmitter
74129	Fitter, electrical switchgear and control apparatus	72339	Fitter, textile machinery
74129	Fitter, electrical transformer	74129	Fitter, transformer
74222	Fitter, electronic computer and related equipment	72339	Fitter, turbine (except aircraft and marine turbine)
74219	Fitter, electronic instruments	72339	Fitter, woodworking machinery
74211	Fitter, electronic prototype	72339	Fitter-assembler, agricultural machinery
74221	Fitter, electronic signalling systems	72322	Fitter-assembler, aircraft engine
74211	Fitter, electronics (general)	72339	Fitter-assembler, earth-moving equipment
74219	Fitter, electronics (industrial equipment)	72339	Fitter-assembler, internal combustion engine (except aircraft and marine engine)
74219	Fitter, electronics (medical equipment)	72332	Fitter-assembler, machinery (general)
74219	Fitter, electronics (meteorological equipment)	72334	Fitter-assembler, marine engine
74221	Fitter, electronics (radio, television and radar equipment)	72339	Fitter-assembler, metalworking machine-tool
74122	Fitter, elevator (electrical)	72339	Fitter-assembler, office machinery
74122	Fitter, escalator	72339	Fitter-assembler, printing machinery
71262	Fitter, gas pipe	72339	Fitter-assembler, textile machinery
74129	Fitter, generator	72339	Fitter-assembler, turbine (except aircraft and marine turbine)
72339	Fitter, industrial machinery	72339	Fitter-assembler, woodworking machinery
72339	Fitter, internal combustion engine (except aircraft and marine engine)	71151	Fixer (carpenter)
72332	Fitter, machinery (general)	71199	Fixer, prefabricated building section
72339	Fitter, maintenance	72122	Flame cutter
72334	Fitter, marine engine	72122	Flame cutter (metal cutting machine)
72339	Fitter, metalworking machine-tool	26521	Flautist
74219	Fitter, meteorological electronic equipment	75190	Flavourer, tobacco
72311	Fitter, motor vehicle	21724	Flight engineer
72339	Fitter, office machinery	21723	Flight navigator
71262	Fitter, pipe (gas)	31593	Flight operations officer
71262	Fitter, pipe (general)	35234	Flight radio operator
71262	Fitter, pipe (marine)	51112	Flight steward
71262	Fitter, pipe (steam)	81819	Float glass bath operator
71262	Fitter, pipe tube (aircraft)	83431	Floating crane operator
71250	Fitter, plate glass	71220	Floor layer (composition tiles)
72339	Fitter, printing machinery	71220	Floor layer, parquetry
74221	Fitter, radar		
74221	Fitter, radio transmitter		

71220	Floor layer, wood block	71000	Foreman, general (building trades)
52201	Floor supervisor (retail trade)	71000	Foreman, general (building)
71220	Floor tiler	73000	Foreman, general (ceramics manufacturing)
21325	Floriculturist	81000	Foreman, general (chemical processing)
52202	Florist	81000	Foreman, general (chemical products manufacturing)
75123	Flour confectionery mixer	81000	Foreman, general (clothing manufacturing)
61131	Flower and orchid farmer	71000	Foreman, general (construction)
36202	Flower arrangement teacher	74000	Foreman, general (electrical and electronic installation and repair)
75390	Flower maker, artificial	82000	Foreman, general (electrical equipment manufacturing and repairing)
26521	Flutist	81000	Foreman, general (electricity generation and distribution)
21725	Flying instructor (except air force)	82000	Foreman, general (electronic equipment manufacturing and repairing)
81599	Folding and baling machine operator (textile weaving)	81000	Foreman, general (food manufacturing)
81431	Folding machine operator (paper box)	81000	Foreman, general (furniture and related products manufacturing)
14121	Food and beverage department manager (hotel)	81000	Foreman, general (gas production and distribution)
91151	Food and beverage establishment cleaner	73000	Foreman, general (glass products manufacturing)
21496	Food and drink technologist	73000	Foreman, general (jewellery manufacturing)
51390	Food checker (catering service)	75000	Foreman, general (leather goods making)
21130	Food chemist	72000	Foreman, general (metal and machinery trades)
91151	Food court cleaner	81000	Foreman, general (metal processing)
75159	Food grader	81000	Foreman, general (metal smelting, converting and refining)
75190	Food pickler	72000	Foreman, general (non-electrical/non-electronic machinery manufacturing and repair)
31412	Food processing technician	81000	Foreman, general (paper products manufacturing)
31412	Food production technician	81000	Foreman, general (papermaking)
31412	Food science technician	81000	Foreman, general (petroleum refining)
52492	Food service counter attendant	81000	Foreman, general (plastic products manufacturing)
94102	Food stall assistant		
75159	Food taster		
31412	Food technician		
21130	Food toxicologist		
81659	Foodstuffs dehydrator		
81619	Foodstuffs freezer		
51491	Foot reflexologist		
34210	Football player		
75361	Footwear maker		
75362	Footwear maker, orthopaedic		
75363	Footwear repairer		
X5000	Foreign ambassador		
X4000	Foreign armed forces		
X5000	Foreign consular general		
X5000	Foreign consular official		
X5000	Foreign diplomatic representative		
26422	Foreign editor		
24142	Foreign exchange broker		
24142	Foreign exchange dealer		
26111	Foreign Lawyer (registered to practise in Singapore)		
81000	Foreman, general (beverage making)		

71000	Foreman, general (plumbing installation and repair)	81855	Freezer operator
73000	Foreman, general (pottery and bricks manufacturing)	81629	Freezer operator (dairy products)
73000	Foreman, general (precision instrument manufacturing)	81619	Freezer, foodstuffs
81000	Foreman, general (prefabrication components manufacturing)	43219	Freight receiving clerk
81000	Foreman, general (printing)	13243	Freight traffic department manager
81000	Foreman, general (rubber products manufacturing)	81732	Fret-saw operator
72000	Foreman, general (ship building and repairing)	81522	Fringing machine operator
75000	Foreman, general (shoemaking)	81819	Frit kilnman
81000	Foreman, general (synthetic material products manufacturing)	75402	Frogman (salvage)
81000	Foreman, general (textile fibre processing and textile manufacturing)	42242	Front office executive
75000	Foreman, general (tobacco products manufacturing)	14111	Front office manager (hotel)
81000	Foreman, general (water supply)	73161	Froster (glass sandblasting)
81000	Foreman, general (well drilling)	81619	Froster operator (food freezing)
81000	Foreman, general (wood products making)	61900	Fruit farm worker
72000	Foreman, shipyard	61900	Fruit farmer
22146	Forensic pathologist	75190	Fruit pickler
26340	Forensic psychologist	75190	Fruit preserver
31199	Forensic science technician	81651	Fruit press operator
54199	Forest patrolman	75401	Fumigator
54199	Forest ranger	33492	Fund administration executive
54199	Forest supervisor	33221	Fund management business development executive
21329	Forestry adviser	24133	Fund manager
61900	Forestry logger	33492	Fund performance measurement executive
21329	Forestry scientist	51931	Funeral director
61900	Forestry worker	96255	Fun-fair attendant
72219	Forge hammer driver	75390	Fur sewer
72219	Forge hammersmith	75390	Fur tailor
72212	Forging-press operator	81219	Furnace charger (metal melting and reheating)
83441	Fork lift truck operator	81211	Furnace charger (ore smelting and refining)
81314	Formic acid plant operator	71120	Furnace liner (bricklaying)
81432	Forming press operator (cardboard article)	81219	Furnace tapper (metal melting)
51910	Fortune teller	81211	Furnace tapper (ore smelting and refining)
33311	Forwarding agent	81312	Furnaceman (chemical and related processes)
21462	Foundry metallurgist	81211	Furnaceman (steel converting)
31193	Foundry technician	81211	Furnaceman (steel refining)
75223	Frame maker, picture	81211	Furnaceman, blast furnace (ore smelting)
81511	Frame operator, spinning (thread and yarn)	81312	Furnaceman, cement
81732	Frame precision sawyer (wood)	81211	Furnaceman, cupola
		81312	Furnaceman, electrode baking
		81811	Furnaceman, glass annealing
		81811	Furnaceman, glass making
		81811	Furnaceman, glass tempering
		81211	Furnaceman, metal converting and refining
		81211	Furnaceman, metal melting

81211	Furnaceman, metal reheating	81531	Garment-sewing machine operator
81211	Furnaceman, open hearth (steel)	72155	Gas and oil well drilling rigger
81859	Furnaceman, refuse disposal	72122	Gas cutting machine operator (metal)
81811	Furnaceman, tempering (glass)	21461	Gas engineer (production and distribution)
72139	Furniture assembler (sheet metal)	21461	Gas engineer (well drilling)
21632	Furniture designer	31194	Gas engineering technician (well drilling)
75291	Furniture maker (basketry)	81319	Gas maker (chlorine, hydrogen, etc)
75291	Furniture maker (cane)	71262	Gas pipe fitter
75291	Furniture maker (rattan)	31194	Gas production and distribution technician
75291	Furniture maker (wicker)	21449	Gas turbine engineer
75221	Furniture maker (wood)	13291	Gas works manager
93336	Furniture mover	81852	Gas-compressor operator
72139	Furniture sheet metal worker	22123	Gastroenterologist
75341	Furniture upholsterer	72222	Gauge maker
75390	Furrier	81420	Gauge maker, plastics
24220	Futures strategist	81259	Gear cutting machine operator (metalworking)
24143	Futures trader	81259	Gear cutting machine setter-operator (metalworking)
	<b>G</b>	81259	Gear setter-operator (metalworking)
74110	Gaffer	73132	Gem cutter and polisher
34332	Gallery technician	73132	Gem setter
81244	Galvaniser	26339	Genealogist
54199	Game sanctuary warden	26112	General counsel
54199	Game warden	81000	General foreman (beverage making)
54199	Gamekeeper	71000	General foreman (building trades)
34221	Games coach	71000	General foreman (building)
21662	Games designer	73000	General foreman (ceramics manufacturing)
33130	Gaming audit officer	81000	General foreman (chemical processing)
33130	Gaming audit senior officer	81000	General foreman (chemical products manufacturing)
54199	Gaming investigator	81000	General foreman (clothing manufacturing)
51701	Gaming supervisor	71000	General foreman (construction)
54199	Gaming surveillance worker	74000	General foreman (electrical and electronic installation and repair)
83431	Gantry or bridge crane operator (non-port)	82000	General foreman (electrical equipment manufacturing and repairing)
83432	Gantry or bridge crane operator (port)	81000	General foreman (electricity generation and distribution)
54130	Gaoler		
72311	Garage mechanic (automobile)		
14324	Garden manager		
61119	Gardener, market		
61133	Gardeners		
92141	Gardening labourer		
75321	Garment cutter		
75323	Garment cutting marker		
21631	Garment designer		
81542	Garment dyer		
75390	Garment ironer (garment making)		
81522	Garment knitting machine operator		
75322	Garment pattern-maker		



82000	General foreman (electronic equipment manufacturing and repairing)	75000	General foreman (tobacco products manufacturing)
81000	General foreman (food manufacturing)	81000	General foreman (water supply)
81000	General foreman (furniture and related products manufacturing)	81000	General foreman (well drilling)
81000	General foreman (gas production and distribution)	81000	General foreman (wood processing)
73000	General foreman (glass products manufacturing)	81000	General foreman (wood products making)
73000	General foreman (jewellery manufacturing)	33492	General insurance claims processing executive
75000	General foreman (leather goods making)	43111	General ledger bookkeeper
72000	General foreman (metal and machinery trades)	11203	General manager (agriculture)
81000	General foreman (metal processing)	11203	General manager (construction)
81000	General foreman (metal smelting, converting and refining)	11203	General manager (hotel)
72000	General foreman (non-electrical/non-electronic machinery manufacturing and repair)	11203	General manager (manufacturing)
81000	General foreman (paper products manufacturing)	11203	General manager (mining and quarrying)
81000	General foreman (papermaking)	11203	General manager (restaurant)
81000	General foreman (petroleum refining)	11203	General manager (retail trade)
81000	General foreman (plastic products manufacturing)	11203	General manager (service firm)
71000	General foreman (plumbing installation and repair)	11122	General manager (statutory board)
73000	General foreman (pottery and bricks manufacturing)	11203	General manager (transport)
73000	General foreman (precision instrument manufacturing)	11203	General manager (wholesale trade)
81000	General foreman (prefabrication components manufacturing)	41101	General office clerk
81000	General foreman (printing)	40000	General office supervisor
81000	General foreman (rubber products manufacturing)	22110	General physician
72000	General foreman (ship building and repairing)	22110	General practitioner
75000	General foreman (shoemaking)	11150	General secretary of labour union
81000	General foreman (synthetic material products manufacturing)	22131	General surgeon
81000	General foreman (textile fibre processing and textile manufacturing)	96111	General waste collection worker
		96111	General waste collector
		81860	Generating plant operator (hydroelectric)
		81860	Generating plant operator (steam)
		74129	Generator fitter
		81860	Generator switchboard operator (power station)
		21349	Geneticist
		21345	Geneticist, animal
		21329	Geneticist, plant
		21142	Geodesist
		21142	Geodesist surveyor
		21652	Geodetic surveyor
		26339	Geographer
		31189	Geological draughtsman
		31189	Geological draughtsperson
		21141	Geological oceanographer
		21141	Geologist
		31119	Geology technician

21142	Geomagnetician	71250	Glazier
21141	Geomorphologist	71250	Glazier, building
21142	Geophysical oceanographer	71250	Glazier, roofing
21142	Geophysicist	71250	Glazier, structural
22129	Geriatrician	71250	Glazier, vehicle
81671	Germination worker (malting)	81811	Glost-kiln fireman (pottery and porcelain)
81653	Gingili miller	81811	Glost-kiln fireman (tile)
81811	Glass annealing furnaceman	75329	Glove cutter
73159	Glass beveller	81723	Glue spreader, veneer
73151	Glass blower	81729	Gluer, edge (veneer sheets)
73151	Glass blower (scientific glass)	81723	Gluer, veneer sheet
81819	Glass blowing machine operator	93334	Godown labourer
21130	Glass chemist	73139	Gold beater
73159	Glass cutter	73133	Goldsmith
73161	Glass cutter (crystal)	96255	Golf caddie
73153	Glass cutter (optical glass)	96255	Golf marshal
73161	Glass cutter-shaper (decorative)	34221	Golf teacher
73162	Glass decorator-painter	34210	Golfer
81819	Glass drawing machine operator	33311	Goods agent (railway)
73159	Glass driller	81830	Goods branding machine operator
73159	Glass edge grinder	93333	Goods loader (aircraft)
73162	Glass enameller	93332	Goods loader (lorry)
73161	Glass engraver	93332	Goods loader (railway and road vehicles)
73161	Glass etcher	81830	Goods marking machine operator
81819	Glass float bath operator	61221	Goose farmer
73159	Glass grinder (laboratory apparatus)	11121	Government administrator
71250	Glass installer (vehicles)	75310	Gown maker
81811	Glass kiln operator	83421	Grab-bucket operator
81819	Glass lathe operator	75390	Grader and classer, fibre
73152	Glass lens moulder	75390	Grader, cloth
81811	Glass making furnaceman	75119	Grader, meat
81819	Glass mixer	75390	Grader, pelt
81819	Glass moulding machine operator	75229	Grader, plywood
73162	Glass painter	71131	Grader, stone
73159	Glass plate roller	75190	Grader, tobacco
81819	Glass pressing machine operator	75229	Grader, veneer
73159	Glass rod maker	75229	Grader, wood
73161	Glass sandblaster	61900	Grain farmer
71250	Glass setter (building)	81630	Grain grinder operator
73162	Glass silverer	81630	Grain miller
21495	Glass technologist	81630	Grain milling machine operator
81811	Glass temperer	81630	Grain roller
73159	Glass tube bender	73219	Grainer, plate (photo-engraving)
73159	Glass tube drawer	73219	Grainer, plate (photogravure)
73159	Glass tube maker	71131	Granite polisher
81812	Glass-fibre maker	81331	Granulator machine operator
81819	Glaze grinder	81660	Granulator operator (sugar refining)
81819	Glaze maker	21661	Graphic artist
81819	Glaze mixer	21661	Graphic designer
73162	Glazer, ceramic		



81220	Hardener, case	83431	Hoist operator (mine)
81220	Hardener, cyanide	72153	Hoisting equipment rigger (construction)
21522	Hardware engineer (computer)	72151	Hoisting equipment rigger (general)
81531	Hat and cap sewer (machine)	53209	Home care aide
75299	Hat maker, straw	91301	Home care worker
61222	Hatcher and breeder, poultry	29090	Home economist
62211	Hatcher, fish	53209	Home health aide
62212	Hatchery worker, fish (aquarium)	53114	Home parent
61222	Hatchery worker, poultry	32300	Homeopath
52110	Hawker (excluding prepared food or drinks)	81629	Homogeniser operator (dairy products)
52120	Hawker (prepared food or drinks)	81256	Honing machine operator (metalworking)
94102	Hawker assistant (prepared food or drinks)	81256	Honing machine setter-operator (metalworking)
91151	Hawker centre cleaner	83326	Hooklift trucks with roll-on container driver
32571	Hawker inspector (government)	51944	Horse trainer
94102	Hawker stall assistant (prepared food or drinks)	31421	Horticultural technical officer
91160	HDB estate cleaner	31421	Horticultural technician
51311	Head waiter	61133	Horticultural worker
13459	Head, training institution	21322	Horticulturist
32300	Healer (drugless treatment)	81419	Hose maker
32300	Healer, faith	81542	Hosiery dyer
13420	Health services manager	81522	Hosiery knitting machine operator
21220	Health statistician	42290	Hospital admissions clerk
53201	Healthcare assistant	96253	Hospital aid
21110	Heat physicist	96253	Hospital attendant
72149	Heater, rivet	91190	Hospital cleaner
81859	Heating and ventilation equipment operator	96253	Hospital orderly
31189	Heating systems draughtsman	22621	Hospital pharmacist
31189	Heating systems draughtsperson	96253	Hospital servant
75361	Heel builder (shoe)	42242	Hospitality services executive
21722	Helicopter pilot (air transport)	14111	Hostel manager
81420	Helmet maker (plastic)	51112	Hostess, air (aircrew)
83501	Helmsman	42244	Hostess, air (ground)
32300	Herbalist	51112	Hostess, aircraft
31419	Herbarium technician	42244	Hostess, airport
11121	High commissioner (government)	51330	Hostess, bar
26120	High Court judge	51999	Hostess, dance
21429	Highway and street construction engineer	42244	Hostess, ground (airport)
71329	Highway lane marker	51330	Hostess, lounge
54121	Highway patrolman	51330	Hostess, night club
34404	High-wire artiste	81242	Hot-dip plater
21313	Histologist, animal	96212	Hotel baggage porter
21312	Histologist, plant	91122	Hotel cleaner
22146	Histopathologist	96211	Hotel concierge
26331	Historian	51200	Hotel cook
83431	Hoist operator (construction)	14112	Hotel keeper (working proprietor)
		14111	Hotel manager

42242	Hotel receptionist		
51502	Hotel steward		
81724	Hot-plate plywood press operator		
72212	Hot-press operator (forging)		
96255	Hot-room attendant (bath)		
33340	House agent		
54191	House detective		
71311	House painter		
53114	House parent		
51502	House steward		
74123	Household appliance repairer, electrical		
51501	Housekeeper (except private service)		
51501	Housekeeper (hotels and other establishments)		
51509	Housekeeper (private service)		
91121	Housekeeping attendant		
51503	Housekeeping matron		
51501	Housekeeping supervisor (except private service)		
91301	Housemaid		
31719	Housing maintenance inspector		
51129	Hovercraft conductor		
31529	Hovercraft pilot		
41103	Human resource clerk		
24231	Human resource consultant		
33451	Human resource development officer		
12121	Human resource manager		
33451	Human resource officer		
51132	Hunting guide		
81630	Husking machine operator (grain milling)		
72321	Hydraulic systems mechanic (aircraft)		
21429	Hydraulics engineer		
21319	Hydrobiologist		
21110	Hydrodynamicist		
81860	Hydroelectric station operator		
81319	Hydrogen gas maker		
81654	Hydrogenation operator (oils and fats)		
21429	Hydrographic engineer		
21653	Hydrographic surveyor		
21142	Hydrologist		
21120	Hydrometeorologist		
61111	Hydroponic farm worker		
32512	Hygienist, dental		
32512	Hygienist, oral		
34409	Hypnotist		
		<b>I</b>	
		81692	Ice making machine operator
		81624	Ice-cream making machine operator
		21313	Ichthyologist
		21519	Illumination engineer
		34402	Illusionist
		21666	Illustrator, advertising
		21666	Illustrator, book
		21666	Illustrator, commercial
		29011	Imam
		33510	Immigration officer
		26550	Impersonator
		14204	Importer (working proprietor)
		73211	Imposer (printing)
		81712	Impregnating machine operator (papermaking)
		81419	Impregnating machine operator (rubber)
		75212	Impregnator (wood treating)
		26541	Impresario
		13291	Incineration plant manager
		61222	Incubator operator
		44110	Index clerk (library)
		73132	Industrial diamond cutter and polisher
		91140	Industrial establishment cleaner
		54192	Industrial investigator
		82121	Industrial machine assembler (electrical)
		21442	Industrial machinery and tools engineer
		72339	Industrial machinery fitter
		72333	Industrial machinery mechanic
		22200	Industrial nurse
		22629	Industrial pharmacist
		34310	Industrial photographer
		22159	Industrial physician
		81000	Industrial plant supervisor and general foreman
		21632	Industrial product designer
		26340	Industrial psychologist
		12122	Industrial relations manager
		33452	Industrial relations officer
		81880	Industrial robot operator
		21493	Industrial safety engineer
		83449	Industrial truck operator
		53113	Infant care assistant
		22129	Infectious diseases physician
		24333	Information and communications technology sales representative
		42249	Information clerk

13301	Information systems manager	31579	Inspector, traffic (railway)
35120	Information technology (IT) field engineer	31573	Inspector, transport service (buses and trams)
24331	Information technology (IT) marketing representative	31720	Inspector, vehicle (government)
36203	Information technology (IT) trainer	33599	Inspector, weights and measures (government)
25152	Information technology auditor	74110	Installation electrician (building)
13304	Information technology manager	72335	Installer and erector, machinery
25111	Information technology project leader	74129	Installer, electric sign
25160	Information technology project manager	71250	Installer, glass (vehicles)
25151	Information technology quality assurance specialist	71272	Installer, refrigeration and air-conditioning equipment
25240	Information technology security specialist	74224	Installer, telecommunications and telephone
25151	Information technology testing specialist	74224	Installer, telegraph
25230	Infrastructure architect (IT)	74224	Installer, telephone and telecommunications
25230	Infrastructure engineer (IT)	74224	Installer, telephone and telegraph
26112	In-house legal counsel	24334	Institutional sales representative, financial
81420	Injection moulding machine operator, plastics	34223	Instructor, aerobics
62220	Inland and coastal waters fisherman	36202	Instructor, art (extracurriculum)
14112	Innkeeper (working proprietor)	36205	Instructor, dance (private tuition)
42249	Inquiries clerk	36206	Instructor, drama (extracurriculum)
61210	Inseminator, artificial (livestock)	51950	Instructor, driving
61223	Inseminator, artificial (poultry)	34223	Instructor, fitness
51601	Inspector of postmen	21725	Instructor, flying (except air force)
33510	Inspector, border	36204	Instructor, guitar (extracurriculum)
34129	Inspector, child care	36201	Instructor, language (extracurriculum)
33152	Inspector, claims	34222	Instructor, martial arts
31129	Inspector, construction	36204	Instructor, music (extracurriculum)
33510	Inspector, customs	34223	Instructor, physical fitness
32571	Inspector, environmental health	36204	Instructor, piano (extracurriculum)
31720	Inspector, factory (occupational safety)	36206	Instructor, speech (extracurriculum)
31720	Inspector, machinery (government)	34221	Instructor, sports
32572	Inspector, occupational health	36204	Instructor, violin (extracurriculum)
33550	Inspector, police	74129	Instrument fitter, electrical
33599	Inspector, price	74219	Instrument fitter, electronic
31579	Inspector, railway transport service	73113	Instrument maker and repairer (optical instrument)
31573	Inspector, road passenger transport service	73119	Instrument maker and repairer (scientific, surgical or dental instruments)
32571	Inspector, sanitary	73119	Instrument maker, dental
33591	Inspector, taxation		
51122	Inspector, ticket		
31573	Inspector, traffic (passenger road transport service)		

73119	Instrument maker, meteorological	34321	Interior designer
73119	Instrument maker, nautical	31602	Interiorscaper
26521	Instrumental musician	72339	Internal combustion engine fitter (except aircraft and marine engine)
26521	Instrumentalist	72339	Internal combustion engine fitter-assembler (except aircraft and marine engine)
21525	Instrumentation engineer	21449	Internal combustion motor engineer
31144	Instrumentation technician	22124	Internal medicine physician
71249	Insulator, acoustical	33393	International market agent
71243	Insulator, air-conditioning and refrigeration equipment	33393	International market representative
71242	Insulator, boiler and pipe	12211	International marketing director
71241	Insulator, building	26432	Interpreter
71249	Insulator, sound proofing	26432	Interpreter, court
33152	Insurance adjuster	73211	Intertype operator
33211	Insurance agent	43142	Interviewer, market research
33152	Insurance assessor	43142	Interviewer, survey (statistical)
33211	Insurance broker	43211	Inventory clerk (stock control)
43122	Insurance claims clerk	54191	Investigator (private)
43122	Insurance clerk	43142	Investigator, field (statistical)
54193	Insurance investigator	54110	Investigator, fire
43122	Insurance policy clerk	54192	Investigator, industrial
33211	Insurance sales representative	54193	Investigator, insurance
33211	Insurance salesman	24120	Investment adviser
13460	Insurance services manager	24141	Investment broker
24150	Insurance underwriter	43129	Investment clerk
73161	Intaglio cutter (glass engraving)	24131	Investment research analyst
33153	Intangible asset valuer	43115	Invoice clerk
21529	Integrated circuit designer	40000	Invoice section supervisor
33492	Intellectual property administrator	44199	Invoicing machine operator
26112	Intellectual property attorney/counsel/lawyer (in-house)	43219	Inward freight clerk
33291	Intellectual property brokers and transaction specialists	91210	Ironer (laundry service)
21499	Intellectual property engineer	75361	Ironer (shoe finishing)
34110	Intellectual property executive	75390	Ironer, garment (garment making)
24120	Intellectual property financial advisor	72219	Ironmongery worker
24120	Intellectual property financier	31421	Irrigation specialist
24299	Intellectual property information analyst	25112	IT business analyst
33211	Intellectual property insurer	25112	IT business consultant
24139	Intellectual property investor	25112	IT business process consultant
34110	Intellectual property legal associate	13304	IT service manager
24212	Intellectual property management consultant	35120	IT user helpdesk technician
29090	Intellectual property strategist	34399	Ivory carver
33153	Intellectual property valuation analyst		
21665	Interaction designer		
34321	Interior decoration designer		
34321	Interior decorator		
31189	Interior design draughtsman		

**J**

81139 Jackhammer driller (mine and quarry)  
 81521 Jacquard loom operator  
 81521 Jacquard weaver  
 96261 Jaga  
 75190 Jam maker  
 96261 Janitor  
 96261 Janitor, church  
 72111 Jarring machine moulder  
 81149 Jaw-crusher operator  
 26524 Jazz singer  
 83424 Jet grouting machine operator  
 21449 Jet motor engineer  
 73132 Jewel cutter and polisher  
 73132 Jewel setter  
 73131 Jeweller (general)  
 21631 Jewellery designer  
 73139 Jewellery enameller  
 73134 Jewellery engraver  
 73139 Jewellery moulder  
 73131 Jewellery repairer  
 73131 Jewellery worker (general)  
 83431 Jib-crane operator (stationary)  
 72222 Jig and gauge maker  
 81420 Jig maker, plastics  
 31182 Jig, tool and die draughtsman  
 31182 Jig, tool and die draughtsperson  
 73141 Jiggerman, pottery and porcelain  
 81732 Jigsaw operator  
 24231 Job analyst  
 24231 Job evaluator  
 24149 Jobber, stock  
 34210 Jockey  
 34405 Jockey, disc  
 71152 Joiner (general)  
 71152 Joiner, aircraft  
 71152 Joiner, bench  
 71152 Joiner, construction  
 71152 Joiner, ship  
 74132 Jointer, cable (electric cable)  
 74132 Jointer, electric cable  
 71263 Jointer, mains  
 71263 Jointer, pipe laying  
 74223 Jointer, telephone and telegraph cable  
 73141 Jollier, pottery and porcelain  
 72111 Jolting machine moulder  
 81439 Joss paper and other ceremonial paper maker  
 26421 Journalist  
 26421 Journalist, broadcast

26120 Judge  
 34224 Judge (sports)  
 26120 Judge of Appeal  
 26120 Judge, District Court  
 26120 Judge, High Court  
 44170 Judge's clerk  
 26120 Judicial Commissioner  
 34409 Juggler  
 23200 Junior college teacher  
 33393 Junket operator

**K**

14325 Karaoke lounge manager  
 29011 Kathi  
 51942 Keeper, animal (zoo)  
 96269 Keeper, lighthouse  
 81859 Keeper, reservoir  
 92149 Keeper, sports grounds  
 51129 Keeper, time (transport)  
 51942 Keeper, zoo  
 62220 Kelong fisherman  
 83501 Kemudi  
 71120 Kerbs installer  
 81312 Kettle operator (chemical and related processes)  
 73211 Keyboard operator, monotype  
 29011 Khatib  
 71120 Kiln bricklayer  
 75211 Kiln drier (wood)  
 81312 Kiln operator (chemical and related processes)  
 75211 Kiln operator (wood seasoning)  
 81811 Kiln setter-in (ceramics)  
 81672 Kilnman (malting)  
 81811 Kilnman, brick and tile  
 81819 Kilnman, frit  
 81811 Kilnman, pottery and porcelain  
 81811 Kilnman, retort (brick and tile)  
 13459 Kindergarten principal  
 36100 Kindergarten teacher  
 94101 Kitchen assistant  
 72249 Knife sharpener (itinerant)  
 75390 Knitter, hand  
 81522 Knitting machine operator  
 81599 Knitting machine setter  
 81542 Knitwear dyer



**L**

96252	Laboratory attendant	21497	Laser engineer
31411	Laboratory technician (biology)	93337	Lashing worker
31111	Laboratory technician (chemistry)	75361	Lasting machine operator (shoemaking)
31112	Laboratory technician (physics)	81259	Lathe operator (metal spinning)
32120	Laboratory technician, medical	81252	Lathe operator (metalworking)
33452	Labour conciliator	81819	Lathe operator, glass
33330	Labour contractor	81149	Lathe operator, stone
33599	Labour inspector (government)	81722	Lathe operator, veneer cutting
33452	Labour management relations conciliator	81739	Lathe operator, wood turning
93100	Labourer (construction)	81252	Lathe setter-operator
96293	Labourer (general)	81739	Lathe setter-operator (woodworking)
93209	Labourer (manufacturing)	91210	Launderer (except private service)
92190	Labourer, farm	81591	Laundering machine operator
93100	Labourer, road maintenance	91210	Laundry and dry cleaning worker (manual, non-household)
93209	Labourer, smokehouse (rubber)	81591	Laundry press machine operator
75229	Ladder maker (wood)	91210	Laundry worker (hotel)
51411	Ladies' hairdresser	96257	Lavatory attendant
81819	Laminated glass worker	44170	Law clerk
81719	Laminating machine operator (papermaking)	26111	Lawyer (practising)
81420	Laminating machine operator, plastics	71290	Layer, carpet
81412	Laminating machine operator, rubber	71263	Layer, drain
81420	Laminator, plastics	71120	Layer, firebrick
21649	Land planner	71263	Layer, mains
31124	Land surveying technician	71263	Layer, pipe
21652	Land surveyor	71220	Layer, tile (composition tiles)
43232	Land transport clerk	92149	Layer, turf
21620	Landscape architect	71220	Layer, wood block floor
21620	Landscape artist	39910	Layworker
34322	Landscape designer	81871	Lead blender (petroleum refining)
61134	Landscape nursery supervisor	81319	Lead oxide maker
92149	Landscape nursery worker	26523	Leader, band
12192	Landscape operations manager	26523	Leader, dance band
31602	Landscape operations officer	34129	Leader, youth
31719	Landscape safety inspector	75190	Leaf conditioner (tobacco)
31719	Landscape safety officer	73139	Leaf maker, precious metal
61133	Landscape technician	96291	Leaflet and newspaper deliverer
92149	Landscape worker	96291	Leaflet and newspaper distributor
36201	Language instructor (extracurriculum)	21130	Leather chemist
36201	Language school teacher	75390	Leather currier
36201	Language teacher (language school)	75390	Leather dyer
22662	Language therapist	75390	Leather dyer and stainer
81259	Lapping machine operator (metalworking)	75364	Leather goods assembler
81259	Lapping machine setter-operator (metalworking)	75364	Leather goods maker
		75364	Leather sewer
		75390	Leather tanner
		23102	Lecturer, polytechnic

23101	Lecturer, university	81522	Link and link-knitting machine operator (garment)
43112	Ledger clerk	73211	Linotype operator
44170	Legal clerk	34409	Lion tamer
26119	Legal counsel (in ministries and statutory boards)	81319	Liquefaction plant operator (liquefied gases)
26112	Legal counsel (in-house)	81872	Liquefied petroleum gas (LPG) filler
26119	Legal Service Officer (appointed by Legal Service Commission)	81679	Liqueur maker
26119	Legislative counsel	75159	Liquor taster
11110	Legislator (national government)	33399	Literary agent
14329	Leisure centre manager	26421	Literary critic
73154	Lens grinding machine operator	21666	Litho artist
73152	Lens moulder, glass	73162	Lithographer (ceramics decorating)
73155	Lens polishing machine operator	81841	Lithographic pressman
71131	Letter cutter, stone	73229	Lithographic transferrer
44199	Letter writer	73229	Lithographic tuscher
71323	Letterer (sign writing)	61210	Livestock farm worker
81841	Letterpress operator	61210	Livestock farmer
26221	Librarian	81860	Load dispatcher (electric power)
44110	Library assistant	93333	Loader, aircraft
96251	Library attendant	93331	Loader, boat and ship
44110	Library clerk	93332	Loader, lorry
14329	Library manager	93332	Loader, railway and road vehicle
34331	Library officer	93332	Loader, truck
34331	Library technician	31595	Load-sheet officer (aircraft)
33492	Life insurance claims processing executive	33120	Loans officer
34129	Life skills worker	72224	Locksmith
54150	Lifeguard	21449	Locomotive (steam) engineer
96259	Lift attendant	83431	Locomotive crane operator
21513	Lift engineer	74110	Locomotive electrician
83449	Lifting truck operator	81829	Locomotive fireman
21110	Light physicist	14112	Lodging house keeper (working proprietor)
83502	Lighterman	14111	Lodging house manager
96269	Lighthouse keeper	81711	Log chipper (machine)
96269	Lighthouse man	33492	Logistic officer
34324	Lighting designer	13241	Logistics manager
26543	Lighting director	93331	Longshoreman
34399	Lighting technician	81521	Loom operator, cloth weaving
83509	Lightshipman	81521	Loom operator, jacquard
21319	Limnologist	93335	Lorry attendant
74131	Lineman, electric power	83321	Lorry driver
74139	Lineman, electric power (underground)	93332	Lorry loader
74131	Lineman, electric traction	72311	Lorry, motor, mechanic
74223	Lineman, telecommunications and telephone	33152	Loss assessor
74223	Lineman, telephone and telegraph	51330	Lounge hostess
81432	Lining machine operator, cardboard	31159	Lubrication engineering technician
		81859	Lubricator (except ship's engines)

73211	Ludlow casting machine operator (printing)	81255	Machine operator, boring (metalworking)
75211	Lumber kiln operator	81739	Machine operator, boring (woodworking)
61900	Lumberjack	81830	Machine operator, bottle washing
26419	Lyric writer	81830	Machine operator, bottling
		81431	Machine operator, box making (paper box)
		81830	Machine operator, boxing (packing)
		81599	Machine operator, braid making
		73211	Machine operator, braille (plate preparer)
		72241	Machine operator, buffing and polishing
		81623	Machine operator, butter making
		81319	Machine operator, candle making
		81830	Machine operator, capping and sealing
		81719	Machine operator, carbon coding (papermaking)
		81432	Machine operator, cardboard lining
		81739	Machine operator, carving (woodworking)
		81141	Machine operator, cast concrete product
		81149	Machine operator, cast stone making
		81420	Machine operator, casting (plastic goods)
		73211	Machine operator, casting (printing type)
		81439	Machine operator, cellophane bag making
		81649	Machine operator, cereal processing
		81311	Machine operator, chemical mixing
		81689	Machine operator, cheroot making
		81722	Machine operator, chipping (veneer cutting)
		81625	Machine operator, chocolate making
		81689	Machine operator, cigar making
		81681	Machine operator, cigarette making
		75361	Machine operator, clicking (shoemaking)

**M**

81599	Machine operator, cloth doubling and winding	81419	Machine operator, dipping (rubber)
81419	Machine operator, coating (rubber)	81512	Machine operator, doubling (thread and yarn)
81331	Machine operator, coating (tablets and pills)	81599	Machine operator, drawing-in (textile weaving)
81243	Machine operator, coating (wire)	81255	Machine operator, drilling (metalworking)
81678	Machine operator, cocoa bean roasting	81591	Machine operator, dry cleaning (laundry service)
81678	Machine operator, cocoa grinding	81841	Machine operator, duplicating
81678	Machine operator, coffee bean roasting	81841	Machine operator, duplicating (braille)
81677	Machine operator, coffee blending	81542	Machine operator, dyeing (garments)
81678	Machine operator, coffee grinding	81542	Machine operator, dyeing (textile)
81842	Machine operator, collating (bookbinding)	81542	Machine operator, dyeing (thread and yarn)
73211	Machine operator, composing (linotype)	83426	Machine operator, earth boring (construction)
83425	Machine operator, concrete finishing (road paving)	73211	Machine operator, elrod casting (printing)
83425	Machine operator, concrete paving	81843	Machine operator, embossing (books)
81629	Machine operator, condensed milk making	81439	Machine operator, embossing (paper)
81626	Machine operator, confectionery making (sugar confectionery)	81419	Machine operator, embossing (rubber)
81890	Machine operator, container filling (except compressed and liquefied gas)	81531	Machine operator, embroidering
81630	Machine operator, corn milling	83421	Machine operator, excavating
81719	Machine operator, corrugating (papermaking)	81419	Machine operator, extruding (rubber)
81719	Machine operator, creping (papermaking)	81693	Machine operator, feed mixing
81719	Machine operator, crinkling (papermaking)	81142	Machine operator, fibro-cement product
81522	Machine operator, crocheting	81320	Machine operator, film drying (motion picture)
43121	Machine operator, currency sorting	81694	Machine operator, fish meal making
81626	Machine operator, cutting (sugar confectionery)	81619	Machine operator, fish processing
81622	Machine operator, dairy product pasteurising	81431	Machine operator, folding (paper box)
81621	Machine operator, dairy product processing (general)	81599	Machine operator, folding and baling (textile weaving)
81320	Machine operator, developing (motion picture)	81522	Machine operator, fringing
81259	Machine operator, die sinking (metalworking)	81522	Machine operator, garment knitting
		81531	Machine operator, garment sewing
		72122	Machine operator, gas cutting (metal)

81259	Machine operator, gear cutting (metalworking)	73211	Machine operator, ludlow casting (printing)
81819	Machine operator, glass blowing	81642	Machine operator, macaroni making
81819	Machine operator, glass drawing	81619	Machine operator, meat processing
81819	Machine operator, glass moulding	81259	Machine operator, metal bending
81819	Machine operator, glass pressing	81255	Machine operator, metal boring
81830	Machine operator, goods branding	72241	Machine operator, metal buffing and polishing
81830	Machine operator, goods marking	81255	Machine operator, metal drilling
81630	Machine operator, grain milling	81257	Machine operator, metal grinding
81331	Machine operator, granulator	81256	Machine operator, metal honing
81678	Machine operator, grinding (cocoa)	81253	Machine operator, metal milling
81678	Machine operator, grinding (coffee)	81254	Machine operator, metal planing
81256	Machine operator, honing (metalworking)	81259	Machine operator, metal sawing
81522	Machine operator, hosiery knitting	81256	Machine operator, metal shaping
81630	Machine operator, husking (grain milling)	81251	Machine operator, metalworking (general)
81692	Machine operator, ice making	81253	Machine operator, milling (metalworking)
81624	Machine operator, ice-cream making	81311	Machine operator, mixing (chemical and related processes)
81712	Machine operator, impregnating (papermaking)	81693	Machine operator, mixing (feed)
81419	Machine operator, impregnating (rubber)	73211	Machine operator, monotype casting (printing)
81522	Machine operator, knitting	83491	Machine operator, motorised sweeper
81719	Machine operator, laminating (papermaking)	81420	Machine operator, moulding (plastics)
81420	Machine operator, laminating (plastics)	81259	Machine operator, nail making
81412	Machine operator, laminating (rubber)	81642	Machine operator, noodle making
81259	Machine operator, lapping (metalworking)	81258	Machine operator, numerical control (metalworking)
75361	Machine operator, lasting (shoemaking)	81659	Machine operator, nut grinding
81591	Machine operator, laundering	81830	Machine operator, packing
81591	Machine operator, laundry press	81432	Machine operator, paper bag making
73154	Machine operator, lens grinding	81890	Machine operator, paper baling
73155	Machine operator, lens polishing	81719	Machine operator, paper coating
81432	Machine operator, lining (cardboard)	81719	Machine operator, paper corrugating
81522	Machine operator, link and link-knitting (garment)	81719	Machine operator, paper creping
		81719	Machine operator, paper crinkling

81439	Machine operator, paper embossing	81591	Machine operator, pressing (laundry service)
81432	Machine operator, paper product making	81841	Machine operator, printing
81719	Machine operator, paper varnishing	81711	Machine operator, pulping (wood pulp)
81719	Machine operator, paper waxing	81653	Machine operator, refining (oils and fats)
81719	Machine operator, paperboard	83425	Machine operator, road surface laying
81712	Machine operator, papermaking	83425	Machine operator, road-making
81622	Machine operator, pasteurising (dairy products)	81678	Machine operator, roasting (cocoa beans)
81630	Machine operator, pearling (grain milling)	81678	Machine operator, roasting (coffee beans)
81739	Machine operator, pencil-making	81419	Machine operator, rubber coating
75361	Machine operator, perforating (shoe finishing)	81419	Machine operator, rubber dipping
81331	Machine operator, pharmaceutical products	81419	Machine operator, rubber embossing
73211	Machine operator, photo-composing	81419	Machine operator, rubber extruding
81841	Machine operator, photocopying	81412	Machine operator, rubber laminating
81320	Machine operator, photograph printing	81739	Machine operator, sanding (woodworking)
81320	Machine operator, photographic products	81655	Machine operator, sauce making
73211	Machine operator, photo-type-setting	81611	Machine operator, sausage making
81254	Machine operator, planing (metalworking)	81259	Machine operator, sawing (metalworking)
81739	Machine operator, planing (woodworking)	81259	Machine operator, screw cutting (metalworking)
81420	Machine operator, plastic product making	81830	Machine operator, sealing and capping
81420	Machine operator, plastics compression moulding	81522	Machine operator, seamless hosiery knitting
81420	Machine operator, plastics extruding	81630	Machine operator, separating (grain milling)
81420	Machine operator, plastics injection	81842	Machine operator, sewing (books)
81420	Machine operator, plastics laminating	81531	Machine operator, sewing (garments)
81723	Machine operator, plywood core laying	81256	Machine operator, shaping (metal-working)
72241	Machine operator, polishing (metalworking)	81739	Machine operator, shaping (woodworking)
81420	Machine operator, polyfoam product-making	81259	Machine operator, shearing (metal cutting)
81420	Machine operator, polythene bag making	81549	Machine operator, singeing
81257	Machine operator, precision grinding (metalworking)	81332	Machine operator, soap making
81890	Machine operator, press baling	81522	Machine operator, sock knitting
		75361	Machine operator, sole sewing

81630	Machine operator, spice milling	81512	Machine operator, winding (thread and yarn)
81849	Machine operator, stapling	81243	Machine operator, wire coating
81522	Machine operator, stocking knitting	81739	Machine operator, wood planing
83425	Machine operator, strike-off (concrete paving)	81729	Machine operator, wood shavings
81660	Machine operator, sugar processing and refining	81731	Machine operator, woodworking (general)
81626	Machine operator, sweets making	81439	Machine operator, wrapping (cardboard box covering)
81676	Machine operator, syrup making	81830	Machine packer
81331	Machine operator, tableting	72149	Machine riveter
83429	Machine operator, tamping (construction)	81255	Machine setter, boring (metalworking)
83425	Machine operator, tar spreading	81739	Machine setter, boring (woodworking)
81677	Machine operator, tea blending	81739	Machine setter, carving (woodworking)
81143	Machine operator, terrazzo tile making	81259	Machine setter, die sinking (metalworking)
81541	Machine operator, textile bleaching	81255	Machine setter, drilling (metalworking)
81543	Machine operator, textile shrinking	81259	Machine setter, gear cutting (metalworking)
81543	Machine operator, textile washing	81256	Machine setter, honing (metalworking)
81432	Machine operator, toilet paper roll	81259	Machine setter, lapping (metalworking)
81339	Machine operator, toiletry products	81259	Machine setter, metal bending
83421	Machine operator, trench digging	81255	Machine setter, metal boring
81890	Machine operator, tube-filling (except compressed and liquefied gas)	81255	Machine setter, metal drilling
83426	Machine operator, tunnelling (construction)	81257	Machine setter, metal grinding
81512	Machine operator, twisting (thread and yarn)	81256	Machine setter, metal honing
73211	Machine operator, type-casting	81253	Machine setter, metal milling
81419	Machine operator, tyre making	81254	Machine setter, metal planing
81419	Machine operator, tyre vulcanising	81259	Machine setter, metal sawing
81719	Machine operator, varnishing (papermaking)	81256	Machine setter, metal shaping
81722	Machine operator, veneer	81251	Machine setter, metalworking (general)
81642	Machine operator, vermicelli making	81253	Machine setter, milling (metalworking)
81522	Machine operator, warp knitting	81259	Machine setter, nail making
81830	Machine operator, washing (bottles)	81258	Machine setter, numerical control (metalworking)
81719	Machine operator, waxing (papermaking)	81739	Machine setter, pencil making
81521	Machine operator, weaving	81254	Machine setter, planing (metalworking)
81712	Machine operator, wet-end (papermaking)	81739	Machine setter, planing (woodworking)
		81257	Machine setter, precision grinding (metalworking)
		81739	Machine setter, sanding (woodworking)

81259	Machine setter, sawing (metalworking)	51423	Make-up artist (stage and studio)
81259	Machine setter, screw cutting (metalworking)	81673	Malt cooker
81256	Machine setter, shaping (metalworking)	81672	Malt fireman
81739	Machine setter, shaping (woodworking)	81679	Malt vinegar maker
81259	Machine setter, shearing (metal cutting)	81671	Maltster
81739	Machine setter, wood planing	22694	Mammographer
81739	Machine setter, wood routing	24211	Management consultant
81739	Machine setter, wood shaping	33491	Management executive (general)
81731	Machine setter, woodworking (general)	12111	Manager, accounting (financial department)
81599	Machine setting, knitting	12112	Manager, administration
81531	Machine sewer (general)	12220	Manager, advertising
21442	Machinery and tools engineer (industrial)	13430	Manager, aged care services
72335	Machinery erector and installer	13101	Manager, agriculture
72332	Machinery fitter (general)	13243	Manager, air traffic operations
72332	Machinery fitter-assembler (general)	14322	Manager, amusement park
31720	Machinery inspector (government)	14330	Manager, art gallery
72331	Machinery mechanic (general)	14330	Manager, arts
72242	Machine-tool grinder	13460	Manager, bank (branch)
81251	Machine-tool operator (general)	14121	Manager, banquet (hotel)
31155	Machining and tooling technician	14111	Manager, boarding house
31155	Machining technician	12111	Manager, budget
34402	Magician	12191	Manager, building security
26120	Magistrate	12212	Manager, business development
21110	Magnetism physicist	12242	Manager, call centre
91121	Maid (hotel)	14321	Manager, casino operations
91309	Maid, kitchen (private service)	14122	Manager, catering services
91122	Maid, linen (hotel)	14201	Manager, chain store
51601	Mail depot supervisor	13410	Manager, child care services
14201	Mail order store manager	14323	Manager, cinema
51609	Mail sorter (manual)	12211	Manager, commercial (manufacturing or mining company)
51601	Mail supervisor	14327	Manager, community club
83223	Mail van driver	24132	Manager, compliance
51602	Mailman	13301	Manager, computer and systems information
71263	Mains layer and jointer	13303	Manager, computer operations and network
71151	Maintenance carpenter	13231	Manager, construction
74110	Maintenance electrician (building)	12130	Manager, corporate planning
72339	Maintenance fitter	14327	Manager, country club
71331	Maintenance man, building	14330	Manager, cultural centre
51311	Maitre d'hotel	12220	Manager, customer relations (hotel)
61900	Maize farmer	12241	Manager, customer service
73211	Maker-up (photo-type-setting)	14201	Manager, departmental store
73211	Maker-up, printing	14325	Manager, discotheque
		14201	Manager, discount store
		13241	Manager, distribution



13459	Manager, education (dean of education institution)	13231	Manager, operations (construction)
13459	Manager, education (registrar)	13243	Manager, operations (port)
13304	Manager, electronic data processing	13244	Manager, operations (postal service)
21333	Manager, energy	13303	Manager, operations (telecommunications)
13291	Manager, engineering	13243	Manager, operations (transport)
12191	Manager, estate	14324	Manager, park
12191	Manager, facilities maintenance	13243	Manager, passenger traffic department
12191	Manager, facilities management	12121	Manager, personnel
13101	Manager, farm	12130	Manager, policy and planning
14121	Manager, fast food restaurant	12130	Manager, policy planning
12111	Manager, finance	13243	Manager, port operations
13460	Manager, financial and insurance services	13244	Manager, postal service operations
13460	Manager, financial institution branch	12191	Manager, premises and facilities maintenance
31711	Manager, fire safety	12191	Manager, premises maintenance
13101	Manager, fishery	13242	Manager, procurement
14121	Manager, food and beverage department (hotel)	13231	Manager, production (construction)
13243	Manager, freight traffic department	13101	Manager, production (farm)
14111	Manager, front office (hotel)	13211	Manager, production (manufacturing)
24133	Manager, fund	13231	Manager, project (construction)
14324	Manager, garden	12191	Manager, property
11122	Manager, general (statutory board)	12220	Manager, public relations
14111	Manager, guest-house	12220	Manager, publicity
13420	Manager, health services	13242	Manager, purchasing
14111	Manager, hostel	13292	Manager, quality assurance
14111	Manager, hotel	12230	Manager, research and development
12121	Manager, human resource	14121	Manager, restaurant
12122	Manager, industrial relations	14201	Manager, retail trade
13301	Manager, information systems	24132	Manager, risk (financial)
13304	Manager, information technology	24132	Manager, risk management
13460	Manager, insurance services manager	12211	Manager, sales
13304	Manager, IT service	13243	Manager, sea traffic operations
14325	Manager, karaoke lounge	14201	Manager, self-service store
12192	Manager, landscape operations	13291	Manager, shipyard
14111	Manager, lodging house	13440	Manager, social welfare
13241	Manager, logistics	13302	Manager, software and applications
14201	Manager, mail order store	14310	Manager, sports centre
12211	Manager, marketing	26549	Manager, stage
13299	Manager, mining	13241	Manager, stores department (manufacturing company)
14111	Manager, motel	14201	Manager, supermarket
14330	Manager, museum	13242	Manager, supplies
14324	Manager, nature reserve	13291	Manager, technical
13303	Manager, network and communications		
14325	Manager, nightclub		

13303	Manager, telecommunications operations	72229	Marker, metal
14322	Manager, theme park	72139	Marker, sheet metal
12123	Manager, training	72149	Marker, structural metal
13243	Manager, transport operations department	75229	Marker, woodworking
14392	Manager, travel agency	24312	Market research analyst
24134	Manager, treasury	43142	Market research interviewer
13241	Manager, warehousing department	40000	Market research supervisor
14326	Manager, wellness centre	24312	Market researcher
14202	Manager, wholesale trade	24132	Marketing analyst (social media)
21493	Manager, workplace safety and health	33223	Marketing and sales representative (food & beverage services)
11201	Managing director	41109	Marketing assistant
51422	Manicurist	33221	Marketing executive
52411	Mannequin	12211	Marketing manager
24339	Manufacturer's agent	81830	Marking machine operator, goods
24339	Manufacturer's sales representative	34222	Martial arts instructor
21411	Manufacturing engineer (general)	81673	Mash-tub man (malt preparation)
31006	Manufacturing engineer, assistant	71131	Mason, monumental
31171	Manufacturing engineering technician (general)	71132	Mason, stone (construction)
13211	Manufacturing plant manager	71230	Mason, stucco
71131	Marble polisher	32551	Massage therapist
71220	Marble setter	32551	Masseur (medical)
21444	Marine architect	51491	Masseur (non-medical)
21319	Marine biologist	32551	Masseur, sports
21654	Marine cartographer	71151	Mast and spar maker, wood
31186	Marine draughtsperson	26523	Master, chorus
31186	Marine draughtsman	31591	Master, dry dock
72334	Marine engine fitter	31591	Master, graving dock
72334	Marine engine fitter-assembler	21713	Master, ship
21443	Marine engineer (shore-based)	83129	Master, yard (railway)
31186	Marine engineering draughtsman	31521	Mate, first (ship)
31186	Marine engineering draughtsperson	31521	Mate, second (ship)
31510	Marine engineering officer	31521	Mate, ship's
31159	Marine engineering technician	93339	Material handler (factory)
71262	Marine pipe fitter	43221	Material planning clerk
54121	Marine policeman	21492	Materials engineer
21714	Marine superintendent (deck)	21211	Mathematician
21712	Marine superintendent (technical)	22200	Matron (nursing)
21712	Marine superintendent engineer	51503	Matron-housekeeper
21653	Marine surveyor	75343	Mattress maker
31157	Marine surveyor (ship and nautical)	75343	Mattress sewer
75323	Marker, garment cutting	75119	Meat boner
71329	Marker, highway lane	75119	Meat curer
		75119	Meat cutter
		75119	Meat dresser (general)
		75119	Meat grader
		81619	Meat processing machine operator
		75119	Meat smoker

72333	Mechanic, accounting and calculating machine	74224	Mechanic, telephone and telegraph
72321	Mechanic, aeronautical	74212	Mechanic, television and radio receiving set
72339	Mechanic, agricultural machinery	74221	Mechanic, television transmitter
71271	Mechanic, air-conditioning and refrigerating equipment	72333	Mechanic, textile machinery
72321	Mechanic, aircraft engine	72311	Mechanic, tractor
72311	Mechanic, automobile	72311	Mechanic, transmission (motor vehicle)
72311	Mechanic, bus	72311	Mechanic, truck
72333	Mechanic, business machine	72339	Mechanic, turbine (except aircraft turbine)
74222	Mechanic, computer and related equipment	72333	Mechanic, typewriter
72333	Mechanic, construction machinery	74212	Mechanic, video reproducing and recording equipment
72339	Mechanic, diesel engine (except motor vehicle)	72333	Mechanic, woodworking machinery
72333	Mechanic, earth moving equipment	72311	Mechanic, workshop (automobile)
74123	Mechanic, electrical household appliance	31182	Mechanical draughtsman
72339	Mechanic, engine-room (ship)	31182	Mechanical draughtsperson
72339	Mechanic, farm machinery	21445	Mechanical engineer (aeronautical)
72311	Mechanic, garage (automobile)	21446	Mechanical engineer (automotive)
72321	Mechanic, hydraulic systems (aircraft)	21441	Mechanical engineer (general)
72333	Mechanic, industrial machinery	21447	Mechanical engineer (heating, ventilation and refrigeration)
72331	Mechanic, machinery (general)	21442	Mechanical engineer (industrial machinery and tools)
72333	Mechanic, metalworking machine-tool	21443	Mechanical engineer (marine)
72333	Mechanic, mining machinery	21449	Mechanical engineer (motors and engines, except marine)
72311	Mechanic, motor (general)	31004	Mechanical engineer, assistant
72311	Mechanic, motor truck	31151	Mechanical engineering technician (general)
72311	Mechanic, motor vehicle (automobile)	31159	Mechanical engineering technician (motors and engines)
72311	Mechanic, motor-cycle	82132	Mechanical products checker (quality assurance)
72333	Mechanic, office machine	82132	Mechanical products quality checker
72339	Mechanic, plant maintenance	82132	Mechanical products tester
72333	Mechanic, printing machinery	83421	Mechanical shovel operator
74221	Mechanic, radar	83491	Mechanical sweeper driver
74212	Mechanic, radio and television receiving set	21110	Mechanics physicist
74221	Mechanic, radio transmitter	31191	Mechantronics technician
72321	Mechanic, service (aircraft engine)	26120	Mediator
72339	Mechanic, ship's engine-room	73114	Medical device assembler
74212	Mechanic, sound reproducing and recording equipment	73114	Medical device repairer
74224	Mechanic, telecommunications and telephone	22694	Medical diagnostic radiographer
74224	Mechanic, telegraphic	32120	Medical laboratory technician
74224	Mechanic, telephone and telecommunications	31171	Medical manufacturing specialist
		22125	Medical oncologist

22146	Medical pathologist	81256	Metal honing machine setter-operator
34310	Medical photographer	72229	Metal marker
22110	Medical practitioner (general)	81211	Metal melting furnaceman
22695	Medical radiation therapist	81253	Metal milling machine operator
42243	Medical receptionist	81253	Metal milling machine setter-operator
24332	Medical sales representative	31199	Metal mining technician
21346	Medical scientist	73120	Metal musical wind instrument maker
22159	Medical service physician (school)	72223	Metal pattern-maker
26353	Medical social worker	81254	Metal planing machine operator
32112	Medical x-ray technician	81254	Metal planing machine setter-operator
22129	Medicine physician, nuclear	72149	Metal plate bender
39910	Medium	81219	Metal pourer
11110	Member of parliament	81259	Metal press operator
51412	Men's hairdresser	73219	Metal printing plate, roller and die engraver
34129	Mental health worker	73219	Metal printing roller engraver
96253	Mental hospital attendant	82199	Metal products assembler
26353	Mental welfare worker	81255	Metal reamer operator
33231	Merchandise buyer (wholesale or retail trade)	81255	Metal reamer setter-operator
33231	Merchandise purchaser (wholesale or retail trade)	81211	Metal refining furnace operator
14204	Merchant, wholesale (working proprietor)	81211	Metal reheating furnaceman
96255	Merry-go-round operator	81215	Metal rolling mill worker
51200	Mess cook (ship)	71210	Metal roofer
51312	Mess steward	81259	Metal sawing machine operator
96259	Messenger	81256	Metal shaping machine operator
81220	Metal annealer	81256	Metal shaping machine setter-operator
81259	Metal bending machine operator	72144	Metal shipwright
81259	Metal bending press operator	81259	Metal spinner
81255	Metal boring machine operator	81245	Metal sprayer
81255	Metal boring machine setter-operator	81220	Metal temperer
72241	Metal buffing and polishing machine operator	72339	Metal working machine-tool fitter
81220	Metal case hardener	72339	Metal working machine-tool fitter-assembler
81219	Metal caster	21130	Metallurgical chemist
81248	Metal cleaner	31199	Metallurgical technician (extractive)
81211	Metal converting furnace operator	31193	Metallurgical technician (physical)
72122	Metal cutter (flame)	21462	Metallurgist
81255	Metal drilling machine operator	21462	Metallurgist, extractive
81255	Metal drilling machine setter-operator	21462	Metallurgist, foundry
73219	Metal engraving etcher (printing plate or roller)	21462	Metallurgist, physical
81257	Metal grinding machine operator	21469	Metal-mining engineer
81257	Metal grinding machine setter-operator	81259	Metalworking automatic transfer machine operator
81256	Metal honing machine operator	81252	Metalworking lathe operator
		81252	Metalworking lathe setter-operator

81251	Metalworking machine setter-operator (general)	21469	Mining engineer (metal)
72333	Metalworking machine-tool mechanic	21461	Mining engineer (petroleum and natural gas)
81259	Metalworking machine-tool operator (general)	31199	Mining engineering technician
73119	Meteorological instrument maker	72333	Mining machinery mechanic
31119	Meteorological technician	13299	Mining manager
21120	Meteorologist	81139	Mining plant operator
96292	Meter reader	31199	Mining technician
21419	Methods engineer	11110	Minister (government)
21319	Microbiologist	29011	Minister of religion
82122	Microelectronics assembler	73162	Mirror silverer
21141	Micropalaeontologist	72249	Mirror-finish polisher (metalworking)
35219	Microphone operator	29019	Missionary
34310	Microphotographer	61900	Mixed farm worker
22200	Midwife, auxiliary	81819	Mixer (glass making)
61210	Milk producer (farm)	75390	Mixer and blender, fibre
61210	Milker	81144	Mixer operator, concrete
61210	Milking machine operator	81819	Mixer, abrasives
81311	Miller, chemicals	81819	Mixer, clay
81653	Miller, coconut oil	75122	Mixer, dough (bread)
81653	Miller, copra	75390	Mixer, fibre
81653	Miller, gingili	75123	Mixer, flour confectionery
81630	Miller, grain	81819	Mixer, glaze
81630	Miller, mustard	81311	Mixer, paint
81630	Miller, oil-seed	75123	Mixer, paste (pies)
81630	Miller, rice	35219	Mixer, sound
81630	Miller, spice	81626	Mixer, sugar confectionery
81699	Miller, tapioca	75190	Mixer, tobacco
81311	Miller-grinder (chemical and related processes)	81311	Mixing and blending machine operator (chemical and related processes)
75390	Milliner	81311	Mixing machine operator (chemical and related processes)
81253	Milling machine operator (metalworking)	81693	Mixing machine operator, feed
81630	Milling machine operator, corn	81411	Mixing mill operator, rubber
81630	Milling machine operator, grain	81144	Mixing plant operator, concrete
81630	Milling machine operator, spice	51321	Mixologist
81253	Milling machine setter-operator (metalworking)	25122	Mobile applications developer
81819	Millman, clay	83431	Mobile crane operator
81819	Millman, potter's	83000	Mobile machinery supervisor and general foreman
81411	Millman, rubber	52411	Model (clothing display)
72333	Millwright	75229	Model maker (wood)
81139	Miner	52419	Model, artist's
81149	Mineral crushing machine operator	52411	Model, fashion
81149	Mineral ore and stone treating plant operator	73141	Modeller, pottery and porcelain
21149	Mineralogist	81626	Mogul operator (sugar confectionery)
31199	Mines inspector	24142	Money broker
26512	Miniature painter	42113	Money changer
21469	Mining engineer (coal)	42132	Moneylender
		39910	Monk

73211	Monotype casting machine operator (printing)	72146	Mould lofter
73211	Monotype keyboard operator	73141	Mould maker, pottery and porcelain
71131	Monument carver-setter	72111	Moulder (metal)
71131	Monumental mason	73149	Moulder, abrasive wheel
43129	Mortgage clerk	81419	Moulder, air-bag (tyre making)
51931	Mortician	73213	Moulder, electrotpe
81739	Morticing machine operator (woodworking)	73152	Moulder, glass lens
81739	Morticing machine setter-operator (woodworking)	72111	Moulder, jarring machine
51931	Mortuary assistant	72111	Moulder, jolting machine
71220	Mosaic cutter and setter	72111	Moulder, squeeze machine
14112	Motel keeper (working proprietor)	73212	Moulder, stereotype
14111	Motel manager	72111	Moulder, stripping-plate machine
35213	Motion picture camera operator	73142	Moulder, tile and brick
26513	Motion picture cartoonist	81419	Moulder, tyre
26542	Motion picture director	81819	Moulding machine operator, glass
26541	Motion picture producer	81420	Moulding machine operator, plastics (compression)
21419	Motion study engineer	81420	Moulding machine operator, plastics (injection)
31179	Motion study technician	81419	Moulding press operator, rubber
83509	Motor boatman	73139	Mounter, jewellery
72311	Motor bus mechanic	73219	Mounter, photogravure
21446	Motor car designer	73219	Mounter, plate
83222	Motor car driver (private)	73219	Mounter, plate (photo-engraving)
83221	Motor car driver (taxi)	93336	Mover, furniture
72311	Motor car mechanic	31596	MRT operations officer (traffic)
83210	Motor cyclist (delivery man)	31572	MRT service supervisor
72311	Motor lorry mechanic	42149	MRT station assistant (fare collection)
72311	Motor mechanic (general)	91190	MRT station cleaner
54121	Motor patrolman (police)	31599	MRT station master
72311	Motor truck mechanic	31599	MRT supervisor (station master)
72311	Motor van mechanic	31596	MRT traffic officer
71322	Motor vehicle body repainter	83110	MRT train operator
91220	Motor vehicle cleaner	81139	Mud-plant operator (oil and gas wells)
74110	Motor vehicle electrician	21664	Multimedia animator
72311	Motor vehicle fitter	21663	Multimedia artist
72311	Motor vehicle mechanic (automobile)	21662	Multimedia designer
71322	Motor vehicle painter	25123	Multimedia developer
91220	Motor vehicle polisher	25123	Multimedia programmer
52202	Motor vehicle sales representative	26212	Museum curator
83210	Motorcycle delivery man	54123	Museum guard
72311	Motor-cycle mechanic	51139	Museum guide
54121	Motor-cycle patrolman	14330	Museum manager
83499	Motorised farm machinery operator	34332	Museum technician
83491	Motorised sweeper operator	61112	Mushroom farm supervisor
81823	Motorman, ship	61112	Mushroom farm worker
34210	Motor-racing driver	61112	Mushroom farmer
83210	Motor-tricycle driver (goods)	26522	Music composer
31156	Mould designer		

26421	Music critic	22134	Neurosurgeon
26529	Music director	26562	News anchor
26523	Music director (band)	26422	News editor (newspaper)
26523	Music director (choir)	26422	News editor (periodical)
26543	Music director (concert)	34310	News photographer
26543	Music director (film)	26561	News reader, radio
26523	Music director (orchestra)	26562	News reader, television
26543	Music director (radio)	26561	Newscaster (radio)
26543	Music director (stage)	26562	Newscaster (television)
26543	Music director (theatre)	26421	Newspaper correspondent
26543	Music director (TV)	96291	Newspaper delivery man
36204	Music instructor (extracurriculum)	26422	Newspaper editor
73219	Music printing engraver	26422	Newspaper editor-in-chief
36204	Music teacher (private tuition)	26421	Newspaper reporter
73120	Musical instrument maker (stringed)	26422	Newspaper sub-editor
73120	Musical instrument maker (woodwind)	52130	Newsvendor
73120	Musical instrument maker, metal (wind)	51330	Night club hostess
73120	Musical instrument repairer	96261	Night watchman
73120	Musical instrument tuner	14325	Nightclub manager
26529	Musical programme director	81314	Nitric acid plant operator
26521	Musician, instrumental	81220	Nitrider
81630	Mustard miller	21469	Non-metalliferous mining engineer
21312	Mycologist	39910	Non-ordained religious associate professional
<b>N</b>			
81259	Nail making machine operator	81642	Noodle making machine operator
53111	Nanny	51603	Notice server
54122	Narcotics officer	26411	Novelist
34332	Naturalist (taxidermist)	22129	Nuclear medicine physician
51132	Nature guide	21110	Nuclear physicist
14324	Nature reserve manager	81860	Nuclear power reactor operator
32300	Naturopath	81258	Numerical control machine operator (metalworking)
73119	Nautical instrument maker	81258	Numerical control machine setter-operator (metalworking)
21444	Naval architect	39910	Nun
31521	Navigating officer, ship's	22200	Nurse (anaesthetist)
21723	Navigator, flight	22200	Nurse (clinic)
X3000	Navy (Singapore)	32200	Nurse (enrolled)
72229	Needle maker	22200	Nurse (maternity)
74129	Neon-lighting electrician	22200	Nurse (obstetrics)
81599	Net maker (fishing)	22200	Nurse (orthopaedic)
25220	Network administrator	22200	Nurse (paediatric)
13303	Network and communications manager	22200	Nurse (psychiatric)
25230	Network architect	22200	Nurse anaesthetist
25230	Network engineer	22200	Nurse educator
35120	Network support technician	22200	Nurse, clinical
25230	Network systems analyst	22200	Nurse, industrial
22129	Neurologist	22200	Nurse, occupational health
22146	Neuropathologist	22200	Nurse, professional (general)
		22200	Nurse, public health
		32400	Nurse, veterinary
		53112	Nursemaid

13101	Nursery manager	33593	Officer, business permit licensing
36100	Nursery school teacher	33591	Officer, excise
61134	Nursery supervisor	31593	Officer, flight operations
61132	Nursery technician	33330	Officer, job placement
53113	Nursery worker (child care)	34331	Officer, library
61132	Nursery worker (farm)	31595	Officer, load sheet (aircraft)
96253	Nursing aid	31596	Officer, MRT operations
53201	Nursing aide (clinic, hospital)	32572	Officer, occupational health
53209	Nursing aide (home)	33510	Officer, passport checking
13430	Nursing home director	33593	Officer, passport issuing
61900	Nut farmer	21232	Officer, research (statistical)
81659	Nut grinding machine operator	33592	Officer, social benefits
81259	Nut maker	21231	Officer, statistical
61900	Nutmeg farm worker	33591	Officer, tax
22652	Nutritionist	81841	Offset pressman
22652	Nutritionist, public health	72155	Oil and gas well drilling rigger
22652	Nutritionist, sports	81871	Oil blender (petroleum refining)
81315	Nylon spinner	75190	Oil expeller
<b>O</b>			
22144	Obstetrician	81652	Oil pressman (edible oils)
24231	Occupational analyst	24341	Oil trader
32572	Occupational health inspector	81859	Oiler and greaser (except ship's engines)
22200	Occupational health nurse	81823	Oiler and greaser, ship's
32572	Occupational health officer	81139	Oilwell fishing-tool operator
22631	Occupational health professional	22159	Oncologist, radiation
22631	Occupational hygiene officer	81211	Open hearth furnaceman (steel)
22631	Occupational hygienist	83431	Opening-bridge operator
22159	Occupational physician	26524	Opera singer
26340	Occupational psychologist	33492	Operations liaison assistant
22680	Occupational therapist	13243	Operations manager (air traffic)
21141	Oceanographer, geological	13231	Operations manager (construction)
21142	Oceanographer, geophysical	13243	Operations manager (port)
96293	Odd job person	13244	Operations manager (postal service)
75119	Offal man	13243	Operations manager (sea traffic)
96251	Office attendant	13303	Operations manager (telecommunications)
96251	Office boy	13243	Operations manager (transport)
52303	Office cashier	14321	Operations manager, casino
91130	Office cleaner	13303	Operations manager, computer
41101	Office clerk (general)	31593	Operations officer, flight
82121	Office machine assembler (electrical)	31596	Operations officer, MRT (traffic)
82122	Office machine assembler (electronic)	21212	Operations research analyst
72333	Office machine mechanic	35110	Operator, computer
72339	Office machinery fitter	35110	Operator, computer high-speed printer
72339	Office machinery fitter-assembler	35110	Operator, computer peripheral equipment
40000	Office supervisor (general)	22145	Ophthalmologist
21239	Officer, actuarial	21497	Optical engineer
31594	Officer, air cargo	73153	Optical glass cutter
33593	Officer, building permit licensing		





71329	Painter, ship's interior	34110	Paralegal associate professional
71323	Painter, sign	32591	Paramedic
71311	Painter, spray (building)	21313	Parasitologist
73162	Painter, spray (ceramics)	43239	Parcel clerk (railway)
71324	Painter, spray (except ships, motor vehicles and signs)	91170	Park cleaner
71329	Painter, spray (motor vehicle assembly)	92149	Park maintenance man
71322	Painter, spray (motor vehicle)	14324	Park manager
71329	Painter, stage scenery	54194	Park ranger
71321	Painter, structural steel and ship hull	91170	Park sweeper
71329	Painter-retoucher (manufacturing)	83225	Parking valet
26519	Painting restorer	31603	Parks officer
21141	Palaeontologist	11110	Parliamentarian
51910	Palmist	26119	Parliamentary counsel
72139	Panel beater (aircraft)	26119	Parliamentary draughtsman
72133	Panel beater (vehicle)	26354	Parole officer
73219	Pantograph engraver operator	71220	Parquetry floor layer
73161	Pantograph operator (glass decorating)	71220	Parquetry worker
81432	Paper bag and envelope maker	71230	Partition installer (plaster)
81890	Paper baling machine operator	13243	Passenger traffic department manager
81431	Paper box maker	33510	Passport checking officer
81719	Paper coating machine operator	33593	Passport issuing officer
81719	Paper corrugating machine operator	75123	Paste mixer (pies)
81719	Paper creping machine operator	81675	Pasteuriser attendant (malt liquor)
81719	Paper crinkling machine operator	81622	Pasteurising machine operator, dairy product
81439	Paper embossing machine operator	29011	Pastor
73219	Paper embossing press operator (printing)	75123	Pastry baker
73149	Paper maker, abrasive-coated	51200	Pastry cook (restaurant)
81320	Paper maker, photographic	75123	Pastry maker
81712	Paper making machine operator	29090	Patent agent
81432	Paper novelty maker	24299	Patent associate
81432	Paper product making machine operator	26112	Patent attorney (excluding patent agent)/counsel/lawyer (in-house)
81711	Paper pulp beater operator	24299	Patent drafter
81711	Paper pulp bleacher operator	24299	Patent examiner
81711	Paper pulp digester operator	29090	Patent strategist
81711	Paper pulp preparation plant operator	22500	Pathologist, animal
81432	Paper strawmaker	22146	Pathologist, clinical
81719	Paper varnishing machine operator	22146	Pathologist, forensic
81719	Paper waxing machine operator	22146	Pathologist, medical
81719	Paperboard machine operator	21323	Pathologist, plant
71312	Paperhanger	26321	Pathologist, social
81871	Paraffin plant operator	22662	Pathologist, speech
34110	Paralegal	22146	Pathologist, surgical
		22500	Pathologist, veterinary
		32120	Pathology technician
		54142	Patrolman (private establishment)
		54199	Patrolman, forest
		54121	Patrolman, highway
		54121	Patrolman, motor (police)

54121	Patrolman, motor-cycle	52491	Petrol pump attendant
54121	Patrolman, police	52491	Petrol service station attendant
54142	Patrolman, security	21461	Petroleum and natural gas engineer
75229	Pattern-maker (wood)	31194	Petroleum and natural gas extraction technician
75322	Pattern-maker, garment	21130	Petroleum chemist
75361	Pattern-maker, shoe	81871	Petroleum desulphurisation treater
83425	Paving machine operator, concrete	81871	Petroleum refining blender
71120	Paviour installer	21452	Petroleum refining engineer
42131	Pawnbroker	81871	Petroleum refining plant control man
43114	Paymaster	81871	Petroleum refining pumpman
43114	Payroll clerk	81871	Petroleum refining stillman
81630	Pearling machine operator (grain milling)	31162	Petroleum refining technician
93310	Pedal vehicle driver	21141	Petrologist
72339	Pedal-cycle repairer	73139	Pewtersmith
93310	Peddaller, trishaw	21130	Pharmaceutical chemist
83499	Pedestrian tractor operator	81331	Pharmaceutical products machine operator
22612	Pedodontist	24332	Pharmaceutical representative
75390	Pelt dresser, tanner and fellmonger	24332	Pharmaceutical sales representative
75390	Pelt dyer	22621	Pharmacist
75390	Pelt finisher	22621	Pharmacist (patient care)
75390	Pelt grader	22621	Pharmacist, hospital
81739	Pencil making machine operator	22629	Pharmacist, industrial
81739	Pencil making machine setter-operator	22621	Pharmacist, retail
26321	Penologist	21341	Pharmacologist
61900	Pepper farm worker	31419	Pharmacology technician
75361	Perforating machine operator (shoe finishing)	32130	Pharmacy technician
51943	Performer in crocodile farm	26339	Philosopher
81314	Perfume distiller	26332	Philosopher, political
81314	Perfume stillman	73211	Photo-composing machine operator
26422	Periodical editor	81841	Photocopying machine operator
26422	Periodical sub-editor	73214	Photo-engraver
22612	Periodontist	73219	Photo-engraving finisher
11121	Permanent secretary	73219	Photo-engraving plate grainer
41201	Personal assistant	73219	Photo-engraving plate moulder
51509	Personal butler	73219	Photo-engraving prover
53209	Personal care worker (old folks home)	21659	Photogrammetrist
41103	Personnel assistant	81320	Photograph developer
41103	Personnel clerk	81320	Photograph printer
33451	Personnel executive	81320	Photograph printing machine operator
12121	Personnel manager	34310	Photographer (commercial illustrator)
33451	Personnel officer	34310	Photographer (general)
75401	Pest controller	34310	Photographer, advertising
75401	Pest exterminator	34310	Photographer, aerial
51941	Pet groomer	34310	Photographer, architectural
44199	Petition writer	34310	Photographer, commercial
21453	Petrochemicals engineer		
31163	Petrochemicals technician (chemical engineering)		

34310	Photographer, fashion	21110	Physicist (general)
34310	Photographer, industrial	21110	Physicist, acoustics
34310	Photographer, medical	21110	Physicist, electricity
34310	Photographer, news	21110	Physicist, electronics
73215	Photographer, photogravure	21110	Physicist, heat
34310	Photographer, police	21110	Physicist, light
34310	Photographer, portrait	21110	Physicist, magnetism
34310	Photographer, press	21110	Physicist, mechanics
34310	Photographer, scientific	21110	Physicist, optics
34310	Photographer, sports	21110	Physicist, sound
81320	Photographic dark room worker	31112	Physics technician
73119	Photographic equipment assembler	21344	Physiologist
81320	Photographic film and paper maker	21313	Physiologist, animal
81320	Photographic film developer	21312	Physiologist, plant
81320	Photographic plate maker	22641	Physiotherapist
81320	Photographic print developer	26521	Pianist
81320	Photographic products machine operator	75229	Piano case maker
21659	Photographic surveyor	36204	Piano instructor (extracurriculum)
35219	Photography, director of (motion picture)	73120	Piano maker
73215	Photogravure cameraman	73120	Piano stringer
73217	Photogravure etcher	73120	Piano tuner
73215	Photogravure photographer	73120	Piano-accordion maker
73219	Photogravure proofer	75190	Pickler, food
73219	Photogravure prover	83229	Pick-up driver
73216	Photogravure retoucher	75223	Picture frame maker
34310	Photo-journalist	26519	Picture restorer
73215	Photolithographer	75123	Pie maker
73229	Photo-mechanical transferrer	73139	Piercer, precious metal
73211	Photo-type-setting machine operator	61210	Pig farm worker
21319	Phycologist	75111	Pig slaughterer
34223	Physical fitness instructor	83424	Pile-driver operator
21462	Physical metallurgist	21424	Piling engineer
31193	Physical metallurgy technician	83424	Piling machine operator
22641	Physical therapist	21722	Pilot, aircraft (except commercial airline and air force)
34229	Physical trainer	21721	Pilot, commercial airline
22110	Physician (general practice)	31522	Pilot, harbour
22143	Physician, emergency	21722	Pilot, helicopter (air transport)
22159	Physician, industrial	31529	Pilot, hovercraft
22129	Physician, infectious diseases	21722	Pilot, seaplane
22159	Physician, medical service (school)	31522	Pilot, ship
22129	Physician, nuclear medicine	21722	Pilot, test (aircraft)
22159	Physician, occupational	71242	Pipe and boiler insulator
22129	Physician, osteopathic	81232	Pipe drawer (seamless)
22147	Physician, public health	71262	Pipe fitter (general)
22129	Physician, rehabilitation	71262	Pipe fitter, gas
22129	Physician, renal	71262	Pipe fitter, marine
22127	Physician, respiratory	71262	Pipe fitter, steam
22129	Physician, specialised	83426	Pipe jacking machine operator
		71263	Pipe layer
		71263	Pipe laying jointer
		71262	Pipe tube fitter, aircraft
		51701	Pit manager

51701	Pit supervisor	81420	Plastics laminating press operator
81139	Pitman	81420	Plastics laminator
33451	Placement officer	81420	Plastics polisher
91190	Places of worship cleaner	81420	Plastics product fabricator
81254	Plane mill operator (metalworking)	72149	Plate bender
81254	Plane mill setter-operator	91152	Plate collector
81254	Planing machine operator (metalworking)	73219	Plate finisher (photo-engraving)
81739	Planing machine operator (woodworking)	71250	Plate glass fitter
81254	Planing machine setter-operator (metalworking)	73159	Plate glass polisher
81739	Planing machine setter-operator (woodworking)	73159	Plate glass rollerman
21641	Planner, town	73219	Plate grainer (photo-engraving)
21649	Planner, traffic	73219	Plate grainer (photogravure)
21641	Planner, urban	73219	Plate maker (photogravure)
21610	Planner, urban design	81320	Plate maker, photographic
21641	Planner, urban land	73219	Plate moulder
43221	Planning clerk (materials supply)	73219	Plate moulder (photo-engraving)
43222	Planning clerk (production)	81215	Plate roller (steel)
21329	Plant biotechnologist	81241	Plater (electroplating)
21329	Plant geneticist	72132	Plater, boilermaking
21312	Plant histologist	81242	Plater, hot-dip
72339	Plant maintenance mechanic	72145	Plater, ship
21323	Plant pathologist	81243	Plater, wire (machine)
21312	Plant physiologist	36100	Play school teacher
21312	Plant taxonomist	34210	Player, football
31422	Plant tissue culture technician	31719	Playground safety inspector
21326	Plant tissue culturist	31719	Playground safety officer
21323	Plant virologist	26411	Playwright
61900	Planter, tree (forestry)	71261	Plumber (general)
71230	Plasterer	71261	Plumber, ship
71230	Plasterer, ornamental	81723	Plywood core layer
71230	Plasterer, stucco	81723	Plywood core-laying machine operator
73219	Plastic finisher (photo-engraving)	75229	Plywood grader
81420	Plastic product making machine operator	81724	Plywood press operator
82199	Plastic products assembler	72149	Pneumatic riveter
22137	Plastic surgeon	83429	Pneumatic-drill operator
21130	Plastics chemist	22693	Podiatrist
81420	Plastics compression moulding machine operator	26411	Poet
81420	Plastics extruding machine operator	54121	Police constable
81420	Plastics gauge and jig maker	54123	Police guard (private)
81420	Plastics injection moulding machine operator	33550	Police inspector
81420	Plastics laminating machine operator	54121	Police patrolman
		34310	Police photographer
		54121	Policeman
		54121	Policeman, harbour
		54121	Policeman, marine
		54121	Policeman, traffic
		24220	Policy analyst
		12130	Policy and planning manager
		43122	Policy clerk, insurance
		12130	Policy planning manager
		72249	Polisher (metalworking)

73132	Polisher and cutter diamond (industrial)	51602	Postman
73132	Polisher and cutter, gem	13244	Postmaster
73161	Polisher, acid (glass decorating)	73141	Potter (general)
91220	Polisher, car	81819	Potter's millman
72249	Polisher, emery (metalworking)	73141	Pottery and porcelain caster
71131	Polisher, granite	73141	Pottery and porcelain die-presser
71131	Polisher, marble	73141	Pottery and porcelain jiggerman
72249	Polisher, mirror-finish (metalworking)	73141	Pottery and porcelain jollier
91220	Polisher, motor vehicle	81811	Pottery and porcelain kilnman
81420	Polisher, plastics	73141	Pottery and porcelain modeller
73159	Polisher, plate glass	73141	Pottery and porcelain mould maker
72249	Polisher, sand (metalworking)	73141	Pottery and porcelain presser
75361	Polisher, shoe (shoemaking)	73141	Pottery and porcelain thrower
71131	Polisher, stone	73149	Pottery and porcelain turner
72241	Polishing machine operator (metalworking)	73162	Pottery artist
73155	Polishing machine operator, lens	73149	Pottery driller
26332	Political philosopher	73141	Pottery worker
26332	Political scientist	61221	Poultry breeder
81420	Polyfoam product making machine operator	75119	Poultry dresser
21130	Polymers chemist	61221	Poultry farm worker (general)
23102	Polytechnic teacher	61221	Poultry farmer
81420	Polythene bag making machine operator	61222	Poultry hatcher and breeder
71261	Pool and filtration system worker	61222	Poultry hatchery worker
26524	Popular music singer	61223	Poultry inseminator
31574	Port and shipping operations supervisor	75111	Poultry slaughterer
31592	Port captain	31423	Poultry Technical officer
31591	Port master, dry dock	81219	Pourer, metal
13243	Port operations manager	21512	Power distribution and transmission engineer
31574	Port operations supervisor	31132	Power distribution technician (electricity)
96213	Porter (airport)	81860	Power generating plant operator
96213	Porter, baggage (except hotel)	21512	Power generation engineer
96212	Porter, baggage (hotel)	31132	Power generation technician (electricity)
96212	Porter, hall (hotel)	81860	Power plant boilerman
96212	Porter, hotel baggage	81852	Power plant operator (compressed air)
96213	Porter, railway	81860	Power plant operator, electricity generating
93334	Porter, warehouse	81860	Power plant operator, hydroelectric
24133	Portfolio manager	81860	Power plant operator, steam
26512	Portrait painter	81860	Power reactor operator
34310	Portrait photographer	81259	Power shear operator
42112	Post office counter clerk	81860	Power switchboard operator
42112	Postal service counter clerk	31132	Power transmission technician (electricity)
13244	Postal service operations manager	22110	Practitioner, general
51601	Postal service supervisor	22110	Practitioner, medical (general)
83223	Postal van driver	62211	Prawn farm worker
21666	Poster artist	62211	Prawn farmer

39910	Preacher (non-ordained)	81419	Press operator, rubber moulding
71149	Precast concrete erectors	81549	Press operator, steam (textile)
73139	Precious metal cutter	81660	Press operator, sugar beet
73139	Precious metal driller	81549	Press operator, textile
73139	Precious metal leaf maker	81419	Press operator, tyre moulding
73139	Precious metal piercer	34310	Press photographer
73139	Precious metal roller	72221	Press tool maker
73139	Precious metal spinner	91210	Presser (laundry service)
81257	Precision grinding machine operator	73141	Presser, pottery and porcelain
81257	Precision grinding machine setter-operator	91210	Presser, steam (laundry service)
73119	Precision instrument calibrator	81591	Pressing machine operator (laundry service)
31196	Precision optics technician	81819	Pressing machine operator, glass
81732	Precision wood sawyer	81719	Pressman (hardboard)
71199	Prefabricated building section assembler	81841	Pressman, lithographic
71199	Prefabricated building section erector	81841	Pressman, offset
71199	Prefabricated building section fixer	81652	Pressman, oil (edible oils)
12191	Premises and facilities maintenance manager	81841	Pressman, printing
12191	Premises maintenance manager	81841	Pressman, wallpaper printing
31601	Premises maintenance officer	23200	Pre-university teacher
75390	Preparer, fibre	33599	Price inspector
75190	Preparer, tobacco	29011	Priest
36100	Pre-primary school teacher	23500	Primary school teacher
11110	President (government)	11110	Prime minister
11203	President, company	83322	Prime mover driver
26120	Presiding Judge (Family Justice Courts)	83322	Prime mover driver (port)
26120	Presiding Judge (State Courts)	13459	Principal, kindergarten
81890	Press baling machine operator	13451	Principal, school
26422	Press editor	81320	Print developer, photographic
24320	Press liaison officer	73221	Printer, batik
81652	Press operator (edible oils)	73221	Printer, block
81651	Press operator (fruit juice extraction)	81320	Printer, film
81432	Press operator, cardboard	81320	Printer, photographic
81625	Press operator, chocolate making	81320	Printer, projection (photography)
81819	Press operator, clay filtering	73221	Printer, silk screen
81431	Press operator, cutting and creasing (paper box)	73221	Printer, textile
81259	Press operator, metal (except forging or plate bending)	81841	Printer, wallpaper
81259	Press operator, metal bending	44191	Printer's proof reader
81420	Press operator, plastics laminating	33399	Printing broker
81724	Press operator, plywood	73219	Printing engraver (metal plate, roller and die)
81419	Press operator, rubber embossing	73214	Printing engraver, photogravure
		73219	Printing etcher (metal plate or roller)
		73217	Printing etcher (photogravure)
		81841	Printing machine operator
		81320	Printing machine operator, photograph
		72339	Printing machinery fitter

72339	Printing machinery fitter- assembler	13211	Production manager (manufacturing)
72333	Printing machinery mechanic	43222	Production planning clerk
73211	Printing maker-up	33499	Production/Materials planner
73219	Printing plate retoucher	22200	Professional nurse (general)
81841	Printing press feeder	52499	Programme salesman (theatre)
81841	Printing pressman	25140	Programmer, analyst
81841	Printing pressman, wallpaper	25140	Programmer, applications
73219	Printing roller engraver	25123	Programmer, multimedia
73229	Printing transferrer, lithographic	25140	Programmer, systems
54130	Prison guard	25140	Programmer, technical
54130	Prison warden	13231	Project manager (construction)
26351	Prison welfare worker	13301	Project manager, information technology
33492	Private banking operations executive	81320	Projection printer (photography)
54191	Private inquiry agent	35216	Projectionist, cinema
54191	Private investigator	52421	Promoter, sales
54123	Private police guard	44191	Proof reader
36910	Private tutor (academic)	73219	Proofer, photogravure
36910	Private tutor (pre-university education)	73211	Proof-pressman
44170	Probate clerk	33340	Property agent
26352	Probation officer	31601	Property management executive
31144	Process instrumentation technician	12191	Property manager
81871	Process pumper (petroleum refining)	33340	Property salesman
51603	Process server	32141	Prosthetic technician
33232	Procurement agent	32141	Prosthetist
21499	Procurement engineer	73219	Prover, photo-engraving
13242	Procurement manager	73219	Prover, photogravure
26544	Producer of commercials	92143	Pruner and trimmer, tree
26541	Producer, computer games	22128	Psychiatrist
61221	Producer, egg (farm)	26340	Psychologist
26541	Producer, motion picture	26340	Psychologist, clinical
26541	Producer, radio and television	26340	Psychologist, educational
26541	Producer, stage	26340	Psychologist, forensic
26541	Producer, theatrical	26340	Psychologist, industrial
24139	Product controller	26340	Psychologist, occupational
24139	Product structurer, financial	26340	Psychologist, research
34399	Product stylist	26340	Psychologist, social
35219	Production assistant	24111	Public accountant
43151	Production co-ordinator (computer operations)	35219	Public address equipment operator
26543	Production designer (film)	22200	Public health nurse
26543	Production designer (stage)	22652	Public health nutritionist
26543	Production designer (studio)	22147	Public health physician
21412	Production engineer	22500	Public health veterinarian
31006	Production engineer, assistant	24320	Public information officer
31172	Production engineering technician	24320	Public liaison officer
13231	Production manager (construction)	43142	Public opinion collector
13101	Production manager (farm)	26119	Public prosecutor
		24320	Public relation consultant
		41109	Public relations assistant
		41109	Public relations clerk
		12220	Public relations manager



24320 Public relations officer  
 24339 Publications sales representative  
 24320 Publicity agent  
 12220 Publicity manager  
 81819 Pug mill operator, clay  
 81139 Puller, well (oil and gas wells)  
 81139 Pulling machine operator (oil and gas wells)  
 81660 Pulp press operator (sugar beet)  
 81711 Pulp refiner operator (papermaking)  
 81711 Pulping machine operator (wood pulp)  
 81311 Pulveriser (chemical and related processes)  
 81871 Pumper, process (petroleum refining)  
 81853 Pumper, water  
 81853 Pumphouse man  
 81853 Pumping station operator  
 81853 Pumpman (except petroleum refinery)  
 81871 Pumpman (petroleum refining)  
 81259 Punching press operator  
 33231 Purchaser, merchandise (wholesale or retail trade)  
 33232 Purchaser, technical  
 33232 Purchasing agent  
 43116 Purchasing clerk  
 13242 Purchasing manager  
 81854 Purifying plant operator (water works)

**Q**

21414 Quality assurance engineer  
 13292 Quality assurance manager  
 25151 Quality assurance specialist, information technology  
 31175 Quality assurance technician  
 82131 Quality checker, electrical products  
 82131 Quality checker, electronic products  
 82132 Quality checker, mechanical products  
 21130 Quality control chemist  
 21414 Quality control engineer  
 82131 Quality control operator (electrical products)  
 82131 Quality control operator (electronic products)

82132 Quality control operator (mechanical products)  
 31197 Quantity surveying technician  
 21494 Quantity surveyor  
 81139 Quarryman (granite)  
 81139 Quarryman (sand)  
 83502 Quartermaster (ship)  
 75349 Quilt maker

**R**

29011 Rabbi  
 51944 Racehorse trainer  
 21529 Radar engineer  
 74221 Radar fitter  
 74221 Radar mechanic  
 31149 Radar technician  
 22159 Radiation oncologist  
 22695 Radiation therapist  
 26541 Radio and television producer  
 74212 Radio and television receiving set mechanic  
 35214 Radio and television studio equipment operator  
 31143 Radio and television technician  
 35214 Radio and television transmitting equipment operator  
 26561 Radio announcer  
 26542 Radio director  
 26545 Radio editor  
 21524 Radio engineer  
 31143 Radio engineering technician  
 26561 Radio news reader  
 35233 Radio officer, ship's  
 35234 Radio operator, flight  
 26561 Radio presenter  
 26541 Radio producer  
 82122 Radio receiver assembler  
 74221 Radio transmitter fitter  
 74221 Radio transmitter mechanic  
 82122 Radio valve assembler  
 26545 Radio, television and video editor  
 22694 Radiographer, medical diagnostic  
 32112 Radiography technician (medical)  
 22142 Radiologist  
 22142 Radiologist, diagnostic  
 35232 Radio-telephone operator (land-based)  
 51121 Rail station service assistant  
 75342 Rail-carriage upholsterer

93332	Railway and road vehicle loader	81860	Rectifier operator (electric current)
83121	Railway brakeman	29011	Rector
91293	Railway carriage cleaner	96000	Recyclables collection supervisor
21429	Railway construction engineer	96111	Recyclables collection worker
51312	Railway dining car waiter	96111	Recyclables collector
83129	Railway engine driver	96112	Recyclables sorter
81829	Railway engine fireman	81512	Reeler (thread and yarn)
83129	Railway gateman	34224	Referee (sports)
33311	Railway goods agent	81625	Refiner (chocolate making)
93332	Railway loader	31192	Refining and smelting technician
96213	Railway porter	81653	Refining machine operator (oils and fats)
31579	Railway service supervisor	32540	Refracting optician
83121	Railway shunter	71244	Refractory worker
83121	Railway signalman	52492	Refreshments salesman (cinema or theatre)
31599	Railway station master	81619	Refrigerating process worker (foodstuffs)
81829	Railway steam engine fireman	71243	Refrigeration and air-conditioning equipment insulator
31599	Railway superintendent (MRT)	71272	Refrigeration and air-conditioning plant installer
31579	Railway transport service inspector	21447	Refrigeration engineer
54199	Ranger, forest	31154	Refrigeration engineering technician
54194	Ranger, park	71272	Refrigeration equipment erector
75291	Rattan furniture maker	81855	Refrigeration system operator
81315	Rayon spinner	81859	Refuse disposal furnaceman
81860	Reactor operator (nuclear power plant)	81859	Refuse disposal incineration plant operator
96292	Reader, meter	22200	Registered nurse
44191	Reader, printer's proof	13459	Registrar (institution of higher learning)
44191	Reader, proof	26120	Registrar in judiciary
33340	Real estate agent	41102	Registry clerk
33340	Real estate salesman	73120	Regulator, tone (musical instrument)
33340	Realtor	22129	Rehabilitation physician
81255	Reamer operator (metalworking)	71141	Reinforced concreter (general)
81255	Reamer setter-operator (metalworking)	72142	Reinforcing iron worker
81419	Rebuilder, tyre	71149	Reinforcing wire mesh worker (concrete)
81419	Recapper, tyre	24120	Relationship manager (financial)
43219	Receiving and despatching clerk	36991	Relief teacher
42241	Receptionist (general)	24141	Remisier
42243	Receptionist, clinic	43114	Remittance clerk
42243	Receptionist, dentist's	81419	Remoulder, tyre
42243	Receptionist, doctor's	93339	Removal man
42242	Receptionist, hotel	22129	Renal physician
42243	Receptionist, medical		
35219	Recording tester		
41103	Records clerk (personnel department)		
43211	Records clerk (stock control)		
40000	Records section supervisor (office)		
91190	Recreation centre cleaner		
22680	Recreational therapist		

13232	Renovation contractor (working proprietor)	21232	Research officer (statistical)
42149	Rent collector	26340	Research psychologist
71322	Repainter, motor vehicle body	24312	Researcher, market
72249	Repairer and sharpener, saw	26323	Researcher, social studies
72133	Repairer, auto-body	42210	Reservations clerk (travel agency)
72339	Repairer, bicycle	81859	Reservoir keeper
72311	Repairer, brake	31125	Resident technical officer
71331	Repairer, building	91160	Residential area cleaner
73119	Repairer, camera	91160	Residential estate cleaner (private housing)
73112	Repairer, clock and watch	81311	Resin compounder (chemical and related processes)
72339	Repairer, coin machine	22127	Respiratory physician
73119	Repairer, dental instrument	51311	Restaurant captain
32143	Repairer, dental prosthesis	52302	Restaurant cashier
72339	Repairer, dispensing machine	91151	Restaurant cleaner
74123	Repairer, electrical (household appliance)	51200	Restaurant cook
75390	Repairer, fabrics	14123	Restaurant keeper (working proprietor)
75363	Repairer, footwear	14121	Restaurant manager
74123	Repairer, household appliance (electrical)	14123	Restaurateur (working proprietor)
73131	Repairer, jewellery	26519	Restorer, painting
73113	Repairer, optical instrument	26519	Restorer, picture
32142	Repairer, orthopaedic appliance	96257	Rest-room attendant
72339	Repairer, pedal-cycle	52202	Retail assistant
72249	Repairer, saw	14203	Retail dealer (working proprietor)
73119	Repairer, scientific, surgical or dental instrument	14201	Retail manager
75363	Repairer, shoe	22621	Retail pharmacist
72133	Repairer, vehicle body	14201	Retail trade manager
72339	Repairer, vending machine	52202	Retail trade salesman
73120	Repairer, violin	14203	Retailer (working proprietor)
73112	Repairer, watch and clock	81811	Retort kilnman (brick and tile)
26421	Reporter	73216	Retoucher, photogravure
41202	Reporter, court	73219	Retoucher, printing plate
26421	Reporter, crime	71329	Retoucher-painter (manufacturing)
26421	Reporter, fashion	81419	Retreader, tyre
26421	Reporter, newspaper	81215	Reversing mill roller (cold steel)
41202	Reporter, shorthand verbatim	81626	Revolving pan operator (sugar confectionery)
26421	Reporter, sports	74129	Rheostat fitter
41202	Reporter, verbatim	22129	Rheumatologist
33392	Representative, advertising	61900	Rice farm worker
11121	Representative, diplomatic (government)	61900	Rice farmer
33393	Representative, international market	81630	Rice miller
24332	Representative, medical sales	93310	Rider, bicycle or tricycle (not motorised)
24332	Representative, pharmaceutical	72159	Rigger, cable railway
21212	Research analyst, operations	72153	Rigger, hoist (construction)
26323	Research analyst, social	72151	Rigger, hoisting equipment (general)
12230	Research and development manager		
24291	Research officer (non-statistical)		

72155	Rigger, oil and gas well drilling	81215	Roller, continuous mill (steel)
71191	Rigger, scaffolding	81215	Roller, hot-rolling (steel)
72154	Rigger, ship	81215	Roller, non-ferrous metals
72159	Rigger, ski-lift	81215	Roller, plate (steel)
24132	Risk analyst (financial)	73139	Roller, precious metal
24132	Risk management manager	81215	Roller, reversing mill (cold steel)
24132	Risk manager (financial)	81215	Roller, seamless pipe and tube
72149	Rivet catcher	81215	Roller, sheet (steel)
72149	Rivet heater	81215	Roller, slabbing mill
81259	Rivet maker	81215	Roller, steel (cold)
72149	Riveter	81626	Roller, sugar confectionery
72149	Riveter, machine	81215	Roller, tandem mill (cold steel)
72149	Riveter, pneumatic	81652	Rollerman (edible oil processing)
93332	Road and railway vehicle loader		
13232	Road building contractor (working proprietor)	81630	Rollerman (grain milling)
		81630	Rollerman (mustard milling)
21429	Road construction engineer	73159	Rollerman (plate glass)
71000	Road construction supervisor and general foreman	81630	Rollerman (rice milling)
		81630	Rollerman (spice milling)
81233	Road extruder operator	81215	Rolling mill stands tender
83425	Road grader and scraper operator	71210	Roofer, metal
		71210	Roofer, slate and tile
93100	Road maintenance labourer	71210	Roofer, tile and slate
83425	Road making machine operator	71250	Roofing glazier
31573	Road passenger transport service inspector	91121	Room steward (hotel)
		72152	Rope and cable splicer (general)
83425	Road roller operator		
83425	Road spreading plant operator	81131	Rotary driller (oil and gas wells)
83425	Road surface laying machine operator	81313	Rotary drum filterer
		81722	Rotary veneer machine operator
31599	Road transport depot superintendent	81259	Router operator (metalworking)
31573	Road transport service supervisor	81259	Router setter-operator (metalworking)
		43239	Routing clerk (freight)
93332	Road vehicle loader	75390	Rover, fibre
81312	Roaster (chemical and related processes)	81890	Rubber baling press operator
81312	Roaster, chemicals	81419	Rubber calender operator
81678	Roasting machine operator, cocoa bean	21130	Rubber chemist
		81419	Rubber coating machine operator
81678	Roasting machine operator, coffee bean		
		81419	Rubber compounder
21449	Robotics engineer	81419	Rubber dipping machine operator
31179	Robotics technician		
81149	Rock crusher operator	81419	Rubber embossing machine operator
81214	Rod casting machine operator, continuous (non-ferrous metal)		
		81419	Rubber extruding machine operator
73159	Rod maker, glass		
75401	Rodent exterminator	61900	Rubber farmer
93100	Rodman (surveying)	82199	Rubber goods assembler
83425	Roller driver (road construction)	81412	Rubber laminating machine operator
81629	Roller plant operator (dried milk)		
81215	Roller, bar mill	81411	Rubber millman
81215	Roller, cold (steel)	81411	Rubber mixing mill operator

81419	Rubber moulding-press operator	33399	Salesman (leasing of vehicles)
61900	Rubber plantation worker	33392	Salesman, advertising
61900	Rubber planter	24141	Salesman, bonds
93209	Rubber sheets clipper and sorter	52422	Salesman, door-to-door
75409	Rubber stamp maker	24331	Salesman, engineering
61900	Rubber tapper	33211	Salesman, insurance
75299	Rush matting maker	52422	Salesman, outdoor
		52499	Salesman, programme (theatre)
		33340	Salesman, property
		33340	Salesman, real estate
		52492	Salesman, refreshments (cinema or theatre)
		52202	Salesman, retail trade
		24141	Salesman, securities
		24331	Salesman, technical
		52202	Salesman, wholesale trade
		33340	Salesperson, property
		33340	Salesperson, real estate
		54110	Salvageman (fire)
		29019	Salvationist
		75190	Samsu maker
		72249	Sand polisher (metalworking)
		75229	Sandals maker (wood)
		71332	Sandblaster (building exteriors)
		81249	Sandblaster (castings)
		73161	Sandblaster (glass decorating)
		81247	Sandblaster (metal)
		71131	Sandblaster (stone cutting)
		81739	Sanding machine operator (woodworking)
		81739	Sanding machine setter-operator (woodworking)
		71261	Sanitary and plumbing worker
		21432	Sanitary engineer
		32571	Sanitary inspector
		81660	Saturation attendant (sugar refining)
		81655	Sauce making machine operator
		96255	Sauna bath attendant
		81611	Sausage making machine operator
		72249	Saw repairer and sharpener
		81259	Sawing machine operator (metalworking)
		81259	Sawing machine setter-operator (metalworking)
		81721	Sawmill operator (band-saw)
		81721	Sawmill sawyer (general)
		81721	Sawyer
		81732	Sawyer, circular (precision)
		73132	Sawyer, diamond (industrial)
		81732	Sawyer, frame precision (wood)
		81732	Sawyer, precision (wood)

## S

75369	Saddler
41109	Safe deposit clerk
21498	Safety and security consultant
21493	Safety engineer (industrial)
81811	Saggar maker
81699	Sago maker
75390	Sail maker
75390	Sail sewer
83502	Sailor
52492	Salad bar counter attendant
43114	Salaries clerk
52422	Sales canvasser
43115	Sales clerk
52421	Sales demonstrator
24331	Sales engineer, computer
24331	Sales engineer, technical
12211	Sales manager
33299	Sales organiser (regional or overseas)
52421	Sales promoter
24332	Sales representative (medical and pharmaceutical products)
24331	Sales representative, computer
24333	Sales representative, information and communications technology
33211	Sales representative, insurance
24339	Sales representative, manufacturer's
52202	Sales representative, motor vehicle
24332	Sales representative, pharmaceutical
24339	Sales representative, publications
24339	Sales representative, sports products
24331	Sales representative, technical
24331	Sales representative, technical equipment
52201	Sales supervisor
33392	Salesman (broadcasting time)

81721	Sawyer, sawmill (general)	81522	Seamless hosiery knitting machine operator
26521	Saxophonist	81232	Seamless pipe and tube drawer
71191	Scaffolder	81215	Seamless pipe and tube roller
71191	Scaffolding rigger	21722	Seaplane pilot
24220	Scenario planning analyst	75211	Seasoner (wood)
26419	Scenario writer	51390	Seater (catering service)
34324	Scenery designer	31510	Second engineering officer (ship)
71329	Scenery painter (stage set)	31521	Second mate (ship)
43221	Schedule clerk (material planning)	31521	Second officer (ship)
43222	Schedule clerk (production planning)	23400	Secondary school teacher
43151	Scheduler (computer operations)	23300	Secretarial school teacher
96259	School attendant	12112	Secretary, company (executive)
91190	School cleaner	34129	Secretary, organising (community centre)
13459	School cluster superintendent	41201	Secretary, stenographic
26357	School counsellor	24141	Securities broker
32511	School dental surgery assistant	43123	Securities clerk
13451	School principal	24141	Securities dealer
13451	School vice principal	24141	Securities sales representative
73151	Scientific glass blower	24141	Securities salesman
73119	Scientific instrument maker and repairer	41109	Security administrator
34310	Scientific photographer	41109	Security administrator assistant
26332	Scientist, political	54142	Security guard (private)
72249	Scissors sharpener (itinerant)	54142	Security officer
83439	Scoop-truck operator	54142	Security patrolman
75390	Scourer, wool fibre	54199	Security screening officer
81890	Scrap baling press operator	25240	Security specialist, information technology
83425	Scraper and grader operator (construction)	54141	Security supervisor
71143	Screeder	81630	Seed dresser (mustard milling)
75299	Screen maker, bamboo	21142	Seismologist
81313	Screen operator (chemicals and related materials)	14123	Self-service restaurant keeper (working proprietor)
81660	Screen operator (sugar refining)	14201	Self-service store manager
73221	Screen stencil printer operator	52302	Seller, ticket (booking office)
81711	Screener operator (paper pulp)	82122	Semi-conductor device assembler
81630	Screenman (grain milling)	21523	Semi-conductor engineer
81259	Screw cutting machine operator (metalworking)	31142	Semi-conductor technician
81259	Screw cutting machine setter-operator (metalworking)	31155	Semiconductor tooling specialist
26415	Script editor	24111	Senior accountant, casino
26412	Script writer	33130	Senior accounting officer
34229	Scuba diving instructor	24111	Senior casino accountant
26511	Sculptor	11150	Senior official of employers' organisation
31560	Sea traffic controller	11160	Senior official of humanitarian organisation
13243	Sea traffic operations manager	11140	Senior official of political party organisation
83502	Seaman	11150	Senior official of workers' organisation
83502	Seaman, able		
83502	Seaman, ordinary		

81630	Separating machine operator (grain milling)	72139	Sheet metal worker (copper)
81313	Separator operator, centrifugal	72131	Sheet metal worker (general)
83509	Serang	72139	Sheet metal worker (tin)
32120	Serology technician	72139	Sheet metal worker, aircraft
96253	Servant, hospital	72139	Sheet metal worker, furniture
51603	Server, notice	72139	Sheet metal worker, ornamental
51603	Server, process	72133	Sheet metal worker, vehicle
51603	Server, summons	81215	Sheet roller (steel)
51121	Service assistant, rail station	93209	Sheet rubber maker
72321	Service mechanic (aircraft engine)	33312	Ship agent
52491	Service station attendant (automobiles)	72144	Ship beam and frame erector
34324	Set decorator (motion pictures)	24342	Ship broker
34324	Set designer	21713	Ship captain
71329	Set painter (motion picture)	71151	Ship carpenter
81859	Sewage plant operator	52499	Ship chandler
81842	Sewer, bookbinding (machine)	24343	Ship charterer
75390	Sewer, fur	91291	Ship cleaner
81531	Sewer, hat and cap (machine)	21444	Ship construction engineer
75364	Sewer, leather	33454	Ship crewing officer
75343	Sewer, mattress	74110	Ship electrician
75390	Sewer, sail	31510	Ship engineering officer
75361	Sewer, shoe	72149	Ship frame bender and turner
75390	Sewer, tent	71321	Ship hull and structural steel painter
21432	Sewerage engineer	71152	Ship joiner
81531	Sewing machine operator (general)	93331	Ship loader
81842	Sewing machine operator, book	81823	Ship motorman
75361	Sewing machine operator, sole (shoemaking)	31522	Ship pilot
81256	Shaping machine operator (metalworking)	72145	Ship plater
81739	Shaping machine operator (woodworking)	71261	Ship plumber
81256	Shaping machine setter-operator (metalworking)	72154	Ship rigger
81739	Shaping machine setter-operator (woodworking)	91291	Ship tank cleaner
24141	Sharebroker	72000	Ship-building and repairing supervisor and general foreman
72249	Sharpener, cutting instrument	21713	Shipmaster
72242	Sharpener, edge tool	33311	Shipping agent
72249	Sharpener, knife (itinerant)	43231	Shipping clerk
72249	Sharpener, saw	43231	Shipping clerk (freight)
72249	Sharpener, scissors (itinerant)	31574	Shipping operations supervisor
61210	Shearer, sheep	21711	Ship's chief engineer
81259	Shearing machine operator (metal cutting)	31521	Ship's chief officer
81259	Shearing machine setter-operator	51111	Ship's chief steward
61210	Sheep shearer	51200	Ship's cook
72139	Sheet metal marker	72339	Ship's engine-room mechanic
81259	Sheet metal spinner	81829	Ship's engine-room rating
		81822	Ship's fireman
		71329	Ship's interior painter
		31521	Ship's mate
		31521	Ship's navigating officer
		81823	Ship's oiler and greaser
		35233	Ship's radio officer
		31521	Ship's second officer
		51112	Ship's steward
		81822	Ship's stocker

31521	Ship's third officer	31149	Signal systems technician (electronic)
72144	Shipwright, metal	72153	Signaller and rigger (Construction)
71151	Shipwright, wood	74129	Signalling equipment fitter (electrical)
72000	Shipyards foreman	74221	Signalling equipment fitter (electronic)
13291	Shipyards manager	83121	Signalman, railway
75361	Shoe cutter	73221	Silk screen printer
75361	Shoe finisher	81630	Silksman (grain milling)
75361	Shoe pattern-maker	73162	Silverer, glass
75361	Shoe polisher (shoemaking)	73162	Silverer, mirror
75363	Shoe repairer	73133	Silversmith
75361	Shoe sewer	31429	Silvicultural technician
75361	Shoemaker	21329	Silviculturist
75362	Shoemaker (orthopaedic)	X3000	Singapore Armed Forces
75361	Shoemaker, bespoke	81549	Singeing machine operator
81139	Shooter (oil and gas wells)	26524	Singer
52202	Shop assistant	26524	Singer, alto
52202	Shop sales assistant	26524	Singer, concert
14201	Shop sales manager	26524	Singer, jazz
14203	Shopkeeper	26524	Singer, opera
91190	Shopping mall cleaner	26524	Singer, popular music
71290	Shorer (construction)	36204	Singing instructor (extracurriculum)
41311	Shorthand typist (general)	36204	Singing teacher (private tuition)
41202	Shorthand verbatim reporter	22301	Sinseh
26411	Short-story writer	22200	Sister (nursing)
75409	Shot firer (mine and quarry)	81599	Sizer
81249	Shotblaster (castings)	81512	Skeiner (thread and yarn)
81247	Shotblaster (metal)	72159	Ski-lift rigger
71131	Shotblaster (stone cutting)	31529	Skipper, yacht
93100	Shovelman	81215	Slabbing mill roller
52201	Showroom supervisor (retail trade)	71210	Slate and tile roofer
52201	Showroom supervisor (wholesale trade)	75111	Slaughterer
81311	Shredder operator (chemical and related processes)	75111	Slaughterer, pig
81543	Shrinker, cloth	75111	Slaughterer, poultry
81543	Shrinker, textile	73153	Slicer, optical glass
83121	Shunter, railway	51492	Slimming consultant
83121	Shunter, train	73153	Slitter, optical glass
83129	Shunting engine driver	41109	Slot administrative assistant
71142	Shutterer, concrete	51701	Slot manager
81660	Sieve operator, sugar	51701	Slot supervisor
51131	Sightseeing guide	35290	Slots technician
26432	Sign language interpreter	81811	Smelter, glass making
71323	Sign painter	93209	Smokehouse attendant
74129	Signage installer (Electronic)	93209	Smokehouse labourer (rubber)
71290	Signage installer (Non-electronic)	75119	Smokehouseman (fish and meat)
21519	Signal systems engineer (electrical)	75119	Smoker, fish
21529	Signal systems engineer (electronic)	75119	Smoker, meat
31139	Signal systems technician (electrical)	75229	Smoking pipe maker



14123	Snack-bar keeper (working proprietor)	23624	Special education teacher for infants and children
81332	Soap making machine operator	22612	Specialised dentist
33592	Social benefits officer	22129	Specialised physician
51991	Social escort	22139	Specialised surgeon
24312	Social media marketing analyst	22621	Specialist pharmacist
26321	Social pathologist	22148	Specialist, ear, nose, throat (ENT)
26340	Social psychologist	23611	Specialist, educational assessment
26323	Social research analyst	31711	Specialist, fire prevention
26323	Social studies researcher	54110	Specialist, fire salvage
26351	Social welfare caseworker	23612	Specialist, teaching aid
13440	Social welfare manager	23612	Specialist, visual teaching aid
26351	Social welfare worker	51200	Specialty cook
26351	Social worker (general)	36206	Speech instructor (extracurriculum)
26352	Social worker, delinquency prevention	22662	Speech pathologist
26353	Social worker, medical	36206	Speech teacher (private tuition)
26321	Sociologist	22662	Speech therapist
81522	Sock knitting machine operator	81630	Spice miller
75349	Soft furnishings maker	81630	Spice milling machine operator
13302	Software and applications manager	81259	Spinner, metal
25121	Software developer	81315	Spinner, nylon
25121	Software engineer	73139	Spinner, precious metal
21312	Soil botanist	81315	Spinner, rayon
21424	Soil mechanics engineer	81259	Spinner, sheet metal
21324	Soil scientist	81315	Spinner, synthetic fibre
72121	Solderer	81511	Spinner, thread and yarn
75361	Sole fitter	81511	Spinning frame operator (thread and yarn)
75361	Sole sewing machine operator	81259	Spinning-lathe operator (metalworking)
26111	Solicitor (practising)	72152	Splicer, rope and cable (general)
44170	Solicitor's clerk	81512	Spooler (thread and yarn)
25113	Solution architect	33399	Sports agent
32111	Sonographer	96255	Sports and recreational attendant
26524	Soprano	26562	Sports announcer (television)
96299	Sorter, bottle (hand)	14310	Sports centre manager
35219	Sound amplifying equipment operator (public address)	34221	Sports coach
21669	Sound designer	91190	Sports complex cleaner
35219	Sound editor (motion picture film)	22651	Sports dietitian
35219	Sound mixer	26422	Sports editor
21110	Sound physicist	75229	Sports equipment maker (wood)
71249	Sound proofing insulator	33320	Sports event organiser
35215	Sound recording equipment operator	33320	Sports event planner
74212	Sound reproducing and recording equipment mechanic	92149	Sports grounds keeper
73120	Sound-board maker (piano)	34221	Sports instructor
34340	Sous chef	32551	Sports masseur
34210	Sparring partner (boxing)	34224	Sports official
34210	Sparring partner (others)	34310	Sports photographer
33219	Special agent (group insurance systems)	22151	Sports physician

22641	Sports physiotherapist	34224	Starter (sports)
26561	Sports presenter (radio)	26119	State Counsel
26562	Sports presenter (television)	42149	Station assistant, MRT (fare collection)
24339	Sports products sales representative	33550	Station Inspector (police)
26340	Sports psychologist	31599	Station master, bus
26421	Sports reporter	31599	Station master, MRT
34229	Sports trainer	31599	Station master, railway
35212	Sports video camera operator	81851	Stationary engine operator (general)
22652	Sports, nutritionist	83431	Stationary jib-crane operator
34210	Sportsman	81000	Stationary machine supervisor and general foreman
81312	Spray drier operator (chemical and related processes)	43141	Statistical assistant (general)
71311	Spray painter (building)	43141	Statistical clerk (general)
73162	Spray painter (ceramics)	43149	Statistical coder
71324	Spray painter (except ships, motor vehicles and signs)	21231	Statistical officer
71329	Spray painter (motor vehicle assembly)	21220	Statistician
71322	Spray painter (motor vehicle)	21220	Statistician, applied statistics
73162	Spray painting decorator (ceramics)	21220	Statistician, economics
81629	Spray plant operator (dried milk)	21220	Statistician, education
81245	Sprayer, metal	21220	Statistician, finance
83425	Spreader operator (concrete paving)	21220	Statistician, health
81259	Spring maker	21220	Statistician, survey
72111	Squeeze machine moulder	81821	Steam boiler fireman
61210	Stable hand	81549	Steam press operator (textile)
41103	Staff records clerk	91210	Steam presser (laundry service)
33453	Staff training organiser	83425	Steam-roller driver
71151	Stage and studio carpenter	72142	Steel bender and fixer (reinforced concrete)
74110	Stage and studio electrician	72143	Steel erector, constructional
26562	Stage compere	72142	Steel reinforcement worker
26542	Stage director	81215	Steel roller (cold)
26549	Stage manager	72141	Steel worker, structural (workshop)
26541	Stage producer	81671	Steeper (malting)
71329	Stage scenery painter	71199	Steeplejack
34324	Stage set designer	83501	Steersman
34399	Stage technician	75190	Stemmer, tobacco
75222	Stainer (wooden furniture finishing)	73229	Stencil plate maker (printing)
75390	Stainer, leather	41311	Stenographer
94102	Stall assistant (coffee shop)	41201	Stenographic secretary
94102	Stall assistant (prepared food or drinks)	41311	Stenographic-typist (general)
52110	Stall holder (excluding prepared food or drinks)	73212	Stereotype caster
52120	Stall holder (prepared food or drinks)	73212	Stereotype moulder
52190	Stall sales worker	73212	Stereotyper
75409	Stamp maker (rubber)	93331	Stevedore
81259	Stamping press operator	34224	Steward (race track)
81849	Stapling machine operator	51112	Steward, aircraft
		51502	Steward, chief (hotel)
		51111	Steward, chief (ship)
		51312	Steward, dining salon (ship)
		51112	Steward, flight
		51502	Steward, hotel

51502	Steward, house	73120	Stringed instrument maker
51312	Steward, mess	73120	Stringer, piano
91121	Steward, room (hotel)	81599	Stripper, bobbin
51112	Steward, ship's	75119	Stripper, gut
51312	Steward, wine	75190	Stripper, tobacco
81314	Still operator (chemical processes, except petroleum)	72111	Stripping-plate machine moulder
81871	Still pump operator (petroleum refining)	21423	Structural engineer (buildings)
81871	Stillman (petroleum refining)	21422	Structural engineer (general)
81314	Stillman, alcohol	31001	Structural engineer, assistant
24141	Stock and shares broker	31184	Structural engineering draughtsman
43211	Stock control clerk	31184	Structural engineering draughtsperson
24149	Stock jobber	31122	Structural engineering technician (general)
43211	Stock records clerk	71250	Structural glazier
24141	Stockbroker	72149	Structural metal marker
81822	Stocker, ship's	71321	Structural steel and ship painter
81522	Stocking knitting machine operator	72143	Structural steel erector
61210	Stockman (livestock worker)	72141	Structural steel worker (workshop)
71131	Stone carver	24139	Structurer, financial product
71131	Stone cutter and finisher	71230	Stucco mason
71131	Stone driller	71230	Stucco plasterer
71131	Stone grader	26359	Student vocational counsellor
71131	Stone grinder	71151	Studio and stage carpenter
71131	Stone polisher	74110	Studio and stage electrician
83429	Stone spreader operator (construction)	35214	Studio equipment operator, radio and television broadcasting (except sound recording)
71132	Stonemason (construction)	93100	Stump grubber
52302	Store cashier	34399	Stylist, fashion
54191	Store detective	34399	Stylist, product
43212	Storekeeper	26422	Sub-editor, newspaper
43212	Storeroom clerk	26422	Sub-editor, periodical
43219	Stores assistant	81660	Sugar beet press operator
43212	Stores clerk	81626	Sugar confectionery mixer
13241	Stores department manager (manufacturing company)	81626	Sugar confectionery roller
40000	Stores supervisor	81660	Sugar crystalliser operator
12130	Strategic planning manager	81660	Sugar grinder
75299	Straw hat maker	81660	Sugar processing and refining machine operator
75299	Straw weaver	81660	Sugar processing equipment operator (continuous refining)
81432	Strawmaker, paper	81660	Sugar sieve operator
91170	Street cleaner and sweeper (except motorised sweeper operator)	81660	Sulphitation man (sugar refining)
91170	Street sweeper and cleaner (except motorised sweeper operator)	81314	Sulphuric acid plant operator
52110	Street vendor (excluding prepared food or drinks)	51603	Summons server
52120	Street vendor (prepared food or drinks)	81712	Supercalender operator
83425	Strike-off machine operator (concrete paving)	13244	Superintendent (postal service)
		31599	Superintendent, barge

31599	Superintendent, ferry	75000	Supervisor and general foreman (furniture and related products manufacturing)
21714	Superintendent, marine (deck)	81000	Supervisor and general foreman (gas production and distribution)
21712	Superintendent, marine (engineer)	73000	Supervisor and general foreman (glass products manufacturing)
21712	Superintendent, marine (technical)	73000	Supervisor and general foreman (jewellery manufacturing)
31599	Superintendent, railway (MRT)	75000	Supervisor and general foreman (leather goods making)
31599	Superintendent, railway depot	74000	Supervisor and general foreman (M&E)
31599	Superintendent, road transport depot	72000	Supervisor and general foreman (metal and machinery trades)
13459	Superintendent, school cluster	81000	Supervisor and general foreman (metal processing)
31574	Superintendent, ship's cargo	81000	Supervisor and general foreman (metal smelting, converting and refining)
31599	Superintendent, terminal (water transport)	72000	Supervisor and general foreman (non-electrical/non-electronic machinery manufacturing and repair)
31599	Superintendent, wharf	81000	Supervisor and general foreman (paper products manufacturing)
14201	Supermarket manager	81000	Supervisor and general foreman (papermaking)
61900	Supervisor (mixed farming)	81000	Supervisor and general foreman (petroleum refining)
71000	Supervisor and general foreman (architectural)	81000	Supervisor and general foreman (plastic products manufacturing)
82000	Supervisor and general foreman (assembly and quality check)	71000	Supervisor and general foreman (plumbing installation and repair)
81000	Supervisor and general foreman (beverage making)	73000	Supervisor and general foreman (pottery and bricks manufacturing)
71000	Supervisor and general foreman (building trades)	73000	Supervisor and general foreman (precision instrument manufacturing)
71000	Supervisor and general foreman (building)	81000	Supervisor and general foreman (prefabrication components manufacturing)
73000	Supervisor and general foreman (ceramics manufacturing)	81000	Supervisor and general foreman (printing)
81000	Supervisor and general foreman (chemical processing)	81000	Supervisor and general foreman (rubber products manufacturing)
81000	Supervisor and general foreman (chemical products manufacturing)	72000	Supervisor and general foreman (ship building and repairing)
81000	Supervisor and general foreman (clothing manufacturing)	75000	Supervisor and general foreman (shoemaking)
71000	Supervisor and general foreman (construction)		
74000	Supervisor and general foreman (electrical and electronic installation and repair)		
82000	Supervisor and general foreman (electrical equipment manufacturing and repairing)		
81000	Supervisor and general foreman (electricity generation and distribution)		
82000	Supervisor and general foreman (electronic equipment manufacturing and repairing)		
81000	Supervisor and general foreman (food manufacturing)		

81000	Supervisor and general foreman (synthetic material products manufacturing)	31579	Supervisor, railway service
81000	Supervisor and general foreman (textile fibre processing and textile manufacturing)	40000	Supervisor, records section (office)
75000	Supervisor and general foreman (tobacco products manufacturing)	31573	Supervisor, road transport service
81000	Supervisor and general foreman (water supply)	52201	Supervisor, sales
81000	Supervisor and general foreman (well drilling)	31574	Supervisor, shipping operations
81000	Supervisor and general foreman (wood processing)	52201	Supervisor, showroom (retail trade)
81000	Supervisor and general foreman (wood products making)	52201	Supervisor, showroom (wholesale trade)
40000	Supervisor, accounts section	40000	Supervisor, stores
31571	Supervisor, air transport service	35231	Supervisor, telecommunications service
51509	Supervisor, camp	31571	Supervisor, traffic (airline)
31579	Supervisor, car park	31574	Supervisor, traffic (ship's cargo)
91000	Supervisor, cleaning	40000	Supervisor, wages section
40000	Supervisor, clerical (general)	74000	Supervisors and general foreman (electrical and electronic trades)
40000	Supervisor, cost section	13242	Supplies manager
51601	Supervisor, courier service	24212	Supply chain consultant
51503	Supervisor, dormitory	43212	Supply clerk
35110	Supervisor, electronic data processing	33232	Supply requirements buyer
61210	Supervisor, farm (livestock)	22132	Surgeon, cardiothoracic
61112	Supervisor, farm (mushrooms)	22131	Surgeon, general
61210	Supervisor, farm (pigs)	22133	Surgeon, hand
61229	Supervisor, farm (poultry)	22612	Surgeon, oral
40000	Supervisor, field (market research)	22135	Surgeon, orthopaedic
40000	Supervisor, field (statistical)	22136	Surgeon, paediatric
52201	Supervisor, floor (retail trade)	22137	Surgeon, plastic
54199	Supervisor, forest	22139	Surgeon, specialised
40000	Supervisor, general office	22132	Surgeon, thoracic
51501	Supervisor, housekeeping (except private service)	22500	Surgeon, veterinary
40000	Supervisor, invoice section	32142	Surgical appliance maker
51601	Supervisor, mail	75362	Surgical boot and shoe maker
51601	Supervisor, mail depot	73119	Surgical instrument maker and repairer
40000	Supervisor, market research	22146	Surgical pathologist
31599	Supervisor, MRT (station master)	41109	Surveillance administrative assistant
31572	Supervisor, MRT service	43142	Survey interviewer (statistical)
61112	Supervisor, mushroom farm	21220	Survey statistician
40000	Supervisor, office (general)	21651	Surveyor (general)
61900	Supervisor, orchard	31158	Surveyor, airworthiness
31574	Supervisor, port and shipping operations	21652	Surveyor, cadastral
31574	Supervisor, port operations	21142	Surveyor, geodesist
51601	Supervisor, postal service	21652	Surveyor, geodetic
		21653	Surveyor, hydrographic
		21652	Surveyor, land
		21653	Surveyor, marine
		31157	Surveyor, marine (ship and nautical)
		21659	Surveyor, photographic

21494	Surveyor, quantity	61900	Tapper, rubber
21652	Surveyor, topographical	61900	Tapper, toddy
31124	Surveyor's technician	61900	Tapper, tree (rubber)
71241	Suspended ceiling installer	83425	Tar spreading machine operator
91140	Sweeper, factory	75151	Taster, coffee and tea
91170	Sweeper, park	34391	Tattooist
91170	Sweeper, street (except motorised sweeper operator)	24113	Tax accountant
81313	Sweetland filter operator	43119	Tax clerk
81626	Sweets making machine operator	33591	Tax officer
96255	Swimming pool attendant	33591	Taxation inspector
83431	Swing-bridge operator	83221	Taxi driver
83121	Switch tender (railway yard)	34332	Taxidermist
81860	Switchboard operator, electricity generating	21313	Taxonomist, animal
42230	Switchboard operator, telephone (private exchange)	21312	Taxonomist, plant
42230	Switchboard operator, telephone (telephone exchange)	81677	Tea blender
74129	Switchgear fitter (electrical)	81677	Tea blending machine operator
81315	Synthetic fibre maker	94104	Tea server
81676	Syrup making machine operator	94104	Tea steward
25111	Systems analyst	75151	Tea taster
25111	Systems designer (computer)	23621	Teacher of the blind
21522	Systems engineer (computer)	23622	Teacher of the deaf
25140	Systems programmer	23622	Teacher of the hearing impaired
		23623	Teacher of the mentally handicapped
		23629	Teacher of the mute
		23629	Teacher of the physically handicapped
		36202	Teacher, art (private tuition)
		36202	Teacher, calligraphy
		36100	Teacher, child care
		23109	Teacher, commercial school (higher education)
		36203	Teacher, computer (computer training school)
		36205	Teacher, dancing (private tuition)
		36206	Teacher, drama (private tuition)
		36202	Teacher, dress making (other than vocational school)
		36202	Teacher, flower arrangement
		34221	Teacher, golf
		23400	Teacher, integrated programme year 1-4
		23200	Teacher, integrated programme year 5-6
		23200	Teacher, junior college
		36100	Teacher, kindergarten
		36201	Teacher, language (language school)
		36201	Teacher, language school
		36204	Teacher, music (private tuition)
		36100	Teacher, nursery school
		36100	Teacher, play school
		23102	Teacher, polytechnic

## T

91129	Table clearer (catering service)
81331	Tablet coater
81331	Tableting machine operator
91152	Table-top cleaner
83502	Taikong
75310	Tailor (made-to-measure garment)
75310	Tailor (ready-to-wear garment)
75390	Tailor fur
75321	Tailor's cutter
43219	Tally clerk
34409	Tamer, lion
83429	Tamping machine operator (construction)
81215	Tandem mill roller (cold steel)
83329	Tanker driver
75212	Tankman (wood treating)
75390	Tanner, leather
72221	Tap and die maker
81699	Tapioca miller
81219	Tapper, furnace (metal melting)
81211	Tapper, furnace (ore smelting and refining)

36100	Teacher, pre-primary school	32119	Technician, audiometric
23200	Teacher, pre-university	31174	Technician, automation
23500	Teacher, primary school	31153	Technician, automotive engineering
36991	Teacher, relief		
23400	Teacher, secondary school	31411	Technician, bacteriology
23300	Teacher, secretarial school	31411	Technician, biochemistry
36204	Teacher, singing (private tuition)	31411	Technician, biological
36206	Teacher, speech (private tuition)	31411	Technician, biotech laboratory
		32120	Technician, blood bank
23400	Teacher, technical education (secondary school)	35211	Technician, broadcasting operations
23300	Teacher, technical school		
23101	Teacher, university	31123	Technician, building
23300	Teacher, vocational school	31161	Technician, chemical engineering (general)
36209	Teacher, youth leadership	31163	Technician, chemical engineering (petrochemicals)
53120	Teachers' aide	31162	Technician, chemical engineering (petroleum)
23612	Teaching aid specialist		
23103	Teaching assistants (universities)	31111	Technician, chemistry
23611	Teaching methods adviser	31121	Technician, civil engineering (general)
23621	Teaching of the visually handicapped		
26414	Technical copywriter	31199	Technician, coal mining
23400	Technical education teacher (secondary school)	35120	Technician, computer
24331	Technical equipment sales representative	35120	Technician, computer systems
		31423	Technician, dairy
24331	Technical equipment salesman	32143	Technician, dental
31189	Technical illustrator	31131	Technician, electrical engineering (general)
26229	Technical information archivist	31132	Technician, electrical engineering (high voltage)
13291	Technical manager	32119	Technician, electrocardiograph
25140	Technical programmer	32119	Technician, electroencephalograph
33232	Technical purchaser		
24331	Technical sales co-ordinator	31195	Technician, electronic pre-press
24331	Technical sales engineer	31141	Technician, electronics engineering (general)
24331	Technical sales representative		
24331	Technical salesman	31199	Technician, extractive metallurgy
23300	Technical school teacher		
26414	Technical writer	31421	Technician, farm (horticulture)
31152	Technician, aeronautical engineering	31412	Technician, food
		31412	Technician, food processing
31152	Technician, aeronautics engineering	31412	Technician, food production
		31412	Technician, food science
31152	Technician, aerospace component repair	31199	Technician, forensic science
		31429	Technician, forestry
31199	Technician, agricultural engineering	31193	Technician, foundry
		34332	Technician, gallery
31429	Technician, agronomy	31194	Technician, gas engineering (well drilling)
31154	Technician, air-conditioning engineering		
		31194	Technician, gas production and distribution
31429	Technician, artificial insemination		
		31119	Technician, geology
31143	Technician, audio and video equipment	32120	Technician, haematology
		31419	Technician, herbarium

31421	Technician, horticultural	31172	Technician, production engineering
31144	Technician, instrumentation	32141	Technician, prosthetic
31411	Technician, laboratory (biology)	31175	Technician, quality assurance
31111	Technician, laboratory (chemistry)	31197	Technician, quantity surveying
31112	Technician, laboratory (physics)	31149	Technician, radar
31124	Technician, land surveying	31143	Technician, radio and television
34331	Technician, library	31143	Technician, radio engineering
34399	Technician, lighting	32112	Technician, radiography (medical)
31159	Technician, lubrication engineering	31192	Technician, refining and smelting
31171	Technician, manufacturing engineering (general)	31154	Technician, refrigeration engineering
31159	Technician, marine engineering	31179	Technician, robotics
31151	Technician, mechanical engineering (general)	31142	Technician, semi-conductor
31159	Technician, mechanical engineering (motors and engines)	32120	Technician, serology
31191	Technician, mechatronics	31139	Technician, signal systems (electrical)
32120	Technician, medical laboratory	31149	Technician, signal systems (electronic)
32112	Technician, medical x-ray	31429	Technician, silvicultural
31199	Technician, metal mining	34399	Technician, stage
31199	Technician, metallurgical (extractive)	31122	Technician, structural engineering (general)
31193	Technician, metallurgical (physical)	31124	Technician, surveyor's
31119	Technician, meteorological	35220	Technician, telecommunications
31199	Technician, mining	31143	Technician, television engineering
31199	Technician, mining engineering	31179	Technician, time study
31179	Technician, motion study	31411	Technician, tissue culture (non-plant)
34332	Technician, museum	31422	Technician, tissue culture (plant)
31194	Technician, oil and gas well drilling	31154	Technician, ventilation engineering
32141	Technician, orthopaedic	32400	Technician, veterinary
32141	Technician, orthotic	31143	Technician, video equipment
32120	Technician, pathology	31179	Technician, work study
31163	Technician, petrochemicals (chemical engineering)	31419	Technician, zoology
31194	Technician, petroleum and natural gas extraction	21496	Technologist, brewery
31162	Technician, petroleum refining	21495	Technologist, ceramics
31419	Technician, pharmacology	21496	Technologist, food and drink
32130	Technician, pharmacy	21495	Technologist, glass
31193	Technician, physical metallurgy	35214	Telecine operator (television broadcasting)
31112	Technician, physics	74224	Telecommunications and telephone installer
31422	Technician, plant tissue culture	74223	Telecommunications and telephone lineman
31132	Technician, power distribution (electricity)	74224	Telecommunications and telephone mechanic
31132	Technician, power generation and transmission	21530	Telecommunications engineer
31196	Technician, precision optics		
31144	Technician, process instrumentation		



21530	Telecommunications network professional	74221	Television transmitter mechanic
13303	Telecommunications operations manager	26545	Television, radio and video editor
35231	Telecommunications service supervisor	42111	Teller, bank
35220	Telecommunications technician	42111	Teller, vault
74224	Telegraph installer	81220	Temperer, metal
35239	Telegrapher	81811	Tempering furnaceman, glass
74224	Telegraphic mechanic	72229	Template maker
41319	Telegraphic typewriter operator	81312	Tender, char-kiln (chemical and related processes)
52440	Telemarketer	81312	Tender, oven (paint drying)
74224	Telephone and telecommunications installer	81215	Tender, rolling mill stands
74223	Telephone and telecommunications lineman	83121	Tender, switch (railway yard)
74224	Telephone and telecommunications mechanic	34210	Tennis player
74223	Telephone and telegraph cable jointer	26524	Tenor
74223	Telephone and telegraph cableman	93100	Tent erector
21530	Telephone engineer	75390	Tent maker
42230	Telephone operator (private exchange)	75390	Tent sewer
42230	Telephone operator (telephone exchange)	31599	Terminal superintendent (water transport)
42230	Telephone switchboard operator (private exchange)	81143	Terrazzo tile making machine operator
42230	Telephone switchboard operator (telephone exchange)	21722	Test pilot (aircraft)
42230	Telephonist	82131	Tester (electrical equipment)
41319	Teleprinter operator	82131	Tester (electronic equipment)
83499	Telescopic handler operator	81872	Tester, cylinder (compressed and liquefied gases)
41319	Teletypist	51950	Tester, driving
74212	Television and radio receiving set mechanic	82131	Tester, electrical products
35214	Television and radio studio equipment operator	82131	Tester, electronic products
35214	Television and radio transmitting equipment operator	82132	Tester, mechanical products
26562	Television announcer	35219	Tester, recording
35213	Television camera operator	25151	Testing specialist, information technology
26562	Television compere	81541	Textile bleacher
26542	Television director	81549	Textile calender operator
26545	Television editor	72249	Textile card grinder
21524	Television engineer	21632	Textile designer
31143	Television engineering technician	81549	Textile drier
26562	Television news reader	75390	Textile fibre clarifier
26562	Television presenter	81542	Textile fibre dyer
26541	Television producer	72339	Textile machinery fitter
82122	Television receiver assembler	72339	Textile machinery fitter-assembler
74221	Television transmitter fitter	72333	Textile machinery mechanic
		81549	Textile press operator
		73221	Textile printer
		81543	Textile shrinker
		81543	Textile washer
		81543	Textile washer and shrinker
		81543	Textile washing machine operator
		81541	Textile-bleaching machine operator

21130	Textiles chemist	71220	Timber flooring worker
81543	Textile-shrinking machine operator	93100	Timberman (construction)
71210	Thatcher	51129	Time keeper (transport)
71151	Theatre carpenter	31179	Time study technician
74110	Theatre electrician	42149	Timekeeper (except transport)
14330	Theatre manager	81242	Tin dipper
35219	Theatre technician	72139	Tinsmith
33399	Theatrical agent	31411	Tissue culture technician (non-plant)
26542	Theatrical director	31422	Tissue culture technician (plant)
26541	Theatrical producer	21326	Tissue culturist, plant
51133	Theme park guide	75190	Tobacco blender
14322	Theme park manager	75190	Tobacco cake maker
29019	Theologian	75190	Tobacco flavourer
22651	Therapeutic dietitian	75190	Tobacco grader
22680	Therapist for orientation of the blind	75190	Tobacco mixer
32512	Therapist, dental	75190	Tobacco paste maker
22662	Therapist, language	75190	Tobacco plug maker
22695	Therapist, medical radiation	75190	Tobacco preparer
22680	Therapist, occupational	75190	Tobacco stemmer
32512	Therapist, oral health	75190	Tobacco stripper
22641	Therapist, physical	81432	Toilet paper roller machine operator
22695	Therapist, radiation	81339	Toiletry products machine operator
22680	Therapist, recreational	42149	Toll collector
22662	Therapist, speech	73120	Tone regulator (musical instrument)
53201	Therapy aide	72221	Tool and die maker
53201	Therapy assistant	31156	Tool designer
21110	Thermodynamicist	72249	Tool grinder (except machine-tool)
31510	Third engineering officer (ship)	72242	Tool grinder (machine-tool)
31521	Third officer (ship)	31155	Tooling technician
22132	Thoracic surgeon	21442	Tools and industrial machinery engineer
75390	Thread cutter	72211	Toolsmith
81512	Thread doubler	31189	Topographical draughtsman
81511	Thread spinner	31189	Topographical draughtsperson
81512	Thread twister	21652	Topographical surveyor
81512	Thread winder	51131	Tour leader
83499	Threshing machine operator	51131	Tourist guide
73141	Thrower, pottery and porcelain	83431	Tower crane operator
52302	Ticket clerk (booking office)	21641	Town planner
96255	Ticket collector	21341	Toxicologist
51122	Ticket inspector	21130	Toxicologist, food
52302	Ticket seller (booking office)	82191	Toy assembler
42210	Ticketing clerk (travel agency)	82191	Toymaker (general)
42210	Ticketing Officer (travel agency)	82191	Toymaker (metal)
34409	Tight-rope walker	82191	Toymaker (stuff toys)
81811	Tile and brick kilnman	82191	Toymaker (wood)
73142	Tile and brick moulder	21519	Traction engineer (electric power)
71210	Tile and slate roofer	83431	Tractor crane operator
71220	Tile layer (composition tiles)		
71220	Tile setter		
71220	Tiler, floor		
71220	Tiler, wall		
61900	Timber cutter (forestry)		

72311	Tractor mechanic	73229	Transferrer, photo-mechanical
24341	Trade broker	74129	Transformer, fitter
33492	Trade finance executive	26431	Translator
29090	Trademark agent	21512	Transmission engineer (electric power)
26112	Trademark attorney/counsel/lawyer (in-house)	72311	Transmission mechanic (motor vehicle)
24299	Trademark examiner	13243	Transport operations manager
24341	Trader, bunker	31573	Transport service inspector (buses and trams)
24144	Trader, commodities (financial)	31579	Transport service inspector, railway
24143	Trader, futures	34404	Trapeze artiste
24341	Trader, oil	42210	Travel agency clerk
32300	Traditional Chinese medicine herbalist	14392	Travel agency manager
22301	Traditional Chinese medicine practitioner	51131	Travel and tourist guide
43149	Traffic clerk	42210	Travel officer
43239	Traffic clerk (freight)	42210	Travel reservations clerk
31540	Traffic controller, air	42210	Travel service clerk
31560	Traffic controller, sea	24339	Traveller, commercial
13243	Traffic department manager	62220	Trawler crewman
21649	Traffic engineer	81419	Tread cutter (tyre making)
31573	Traffic inspector (passenger road transport service)	24134	Treasury manager
31579	Traffic inspector (railway)	33492	Treasury officer
31596	Traffic officer, MRT	24334	Treasury sales executive
21649	Traffic planner	81871	Treater (petroleum refining)
54121	Traffic policeman	81871	Treater, desulphurisation (petroleum refining)
31571	Traffic supervisor (airline)	92143	Tree cutter
31574	Traffic supervisor (ship's cargo)	61900	Tree feller (logging)
83322	Trailer truck driver	61900	Tree planter (forestry)
83121	Train brakeman	92143	Tree pruner and trimmer
83110	Train driver	61900	Tree tapper (rubber)
74110	Train electrician	83421	Trench digging machine operator
83121	Train shunter	51419	Trichologist
51945	Trainer (obedience school)	93310	Tricycle driver (not motorised)
51942	Trainer (zoo)	75361	Trimmer (shoe finishing)
51943	Trainer in crocodile farm	75361	Trimmer, edge (shoe finishing)
51942	Trainer, animal (zoo)	81419	Trimmer, tyre
51942	Trainer, bird	75119	Tripe dresser
51945	Trainer, dog	93310	Trishaw man
51942	Trainer, elephant	93310	Trishaw pedaller
51945	Trainer, greyhound	62212	Tropical fish farm worker
51944	Trainer, horse	62212	Tropical fish farmer
34229	Trainer, physical	83321	Truck driver
51944	Trainer, race horse	93332	Truck loader
34409	Trainer, wild animal (circus)	72311	Truck mechanic
51942	Trainer, wild animal (zoo)	83441	Truck operator, fork lift
33453	Training executive	26521	Trumpeter
13459	Training institution head	33492	Trust and estate planning executive
12123	Training manager	33221	Trust business development executive
33453	Training officer		
83312	Tram driver		
73229	Transferrer, direct lithographic		
73229	Transferrer, lithographic		

- 33492 Trust custody service executive  
72112 Tube coremaker  
81232 Tube drawer (seamless)  
81233 Tube extruder operator (metal)  
81890 Tube filling machine operator (except compressed and liquefied gas)  
73159 Tube maker, glass  
81629 Tubular heating man (condensed milk)  
83509 Tugboatman  
34403 Tumbler  
62220 Tuna boat crewman  
73120 Tuner, accordion  
72311 Tuner, engine  
73120 Tuner, musical instrument  
73120 Tuner, organ  
73120 Tuner, piano  
72311 Tuner, vehicle engine  
21429 Tunnel construction engineer  
83426 Tunnelling machine operator (construction)  
72339 Turbine fitter (except aircraft and marine turbine)  
72339 Turbine fitter-assembler (except aircraft and marine turbine)  
72339 Turbine mechanic (except aircraft turbine)  
81860 Turbine operator (power station)  
92149 Turf layer  
61221 Turkey farmer  
81252 Turner  
73149 Turner, pottery and porcelain  
81739 Turner, wood  
42149 Turnstile collector  
81314 Turpentine distiller  
81314 Turpentine stillman  
73229 Tuscher, lithographic  
36910 Tutor, private (academic)  
36910 Tutor, private (primary education)  
36910 Tutor, private (secondary education)  
23103 Tutors (universities)  
81512 Twiner (thread and yarn)  
81512 Twister, thread and yarn  
81512 Twisting helper  
81512 Twisting machine operator (thread and yarn)  
73211 Type-casting machine operator  
73211 Type-setter (composing)  
73211 Type-setter (linotype)  
73211 Type-setter (photo-type)  
73211 Type-setter-perforator operator  
72333 Typewriter mechanic  
41319 Typewriter operator, telegraphic  
41312 Typing clerk  
41312 Typist  
41311 Typist, shorthand (general)  
73211 Typograph operator  
21666 Typographical designer  
81419 Tyre builder  
81419 Tyre groover  
81419 Tyre making machine operator  
81419 Tyre moulder  
81419 Tyre moulding press operator  
81419 Tyre rebuilder  
81419 Tyre recapper  
81419 Tyre remoulder  
81419 Tyre retreader  
81419 Tyre trimmer  
81419 Tyre vulcaniser  
81419 Tyre vulcanising machine operator
- ## U
- 81248 Ultrasonic cleaner (metal)  
75390 Umbrella maker  
34224 Umpire (sports)  
74139 Underground cable layer  
51931 Undertaker  
72159 Underwater cable splicer  
75402 Underwater diver  
24150 Underwriter  
24150 Underwriter, insurance  
43122 Underwriting clerk  
23101 University teacher  
75349 Upholsterer, aircraft  
75342 Upholsterer, automobile  
75341 Upholsterer, furniture  
75342 Upholsterer, rail-carriage  
75349 Upholsterer, soft furnishings  
75342 Upholsterer, vehicle  
21610 Urban design architect  
21641 Urban land planner  
21641 Urban planner  
22138 Urologist  
21665 User experience designer  
96259 Usher
- ## V
- 61229 Vaccinator (poultry)  
32400 Vaccinator, veterinary  
81619 Vacuum oven operator (foodstuffs)

81314	Vacuum pan operator (chemical and related processes)	31154	Ventilation engineering technician
81629	Vacuum pan operator (condensed milk)	31189	Ventilation systems draughtsman
81619	Vacuum pan operator (food essences)	31189	Ventilation systems draughtsperson
83225	Valet (parking)	34409	Ventriloquist
96212	Valet service boy (hotel)	33492	Venture capital & private equity administrators
33151	Valuer	33221	Venture capital & private equity business development executive
83223	Van driver	41202	Verbatim reporter
72311	Van, motor, mechanic	81642	Vermicelli making machine operator
75222	Varnisher (wooden furniture finishing)	22500	Veterinarian
81719	Varnishing machine operator (papermaking)	22500	Veterinarian, public health
42111	Vault teller	32400	Veterinary assistant
61119	Vegetable farmer	22500	Veterinary epidemiologist
61119	Vegetable garden worker	32400	Veterinary nurse
75190	Vegetable pickler	22500	Veterinary pathologist
75190	Vegetable preserver	22500	Veterinary surgeon
72312	Vehicle body builder	32400	Veterinary technician
75229	Vehicle body builder (wood)	32400	Veterinary vaccinator
72133	Vehicle body repairer	83425	Vibrating-screed operator (concrete paving)
74110	Vehicle electrician	29011	Vicar
72311	Vehicle engine tuner	13451	Vice principal, school
72312	Vehicle frame builder	35212	Video camera operator
75229	Vehicle frame builder (wood)	35212	Video camera operator, sports
71250	Vehicle glazier	26545	Video editor
31720	Vehicle inspector (government)	21524	Video equipment engineer
31720	Vehicle inspector (private sector)	74212	Video equipment mechanic
93332	Vehicle loader, road and railway	31143	Video equipment technician
72133	Vehicle sheet metal worker	35214	Video operator (television broadcasting)
75342	Vehicle upholsterer	35214	Video recording equipment operator (television broadcasting)
91220	Vehicle washer	74212	Video reproducing and recording equipment mechanic
96292	Vending machine collector	81679	Vinegar maker
72339	Vending machine repairer and servicer	61900	Vineyard worker
52110	Vendor, street (excluding prepared food or drinks)	36204	Violin instructor (extracurriculum)
52120	Vendor, street (prepared food or drinks)	73120	Violin maker and repairer
75222	Veneer applier	26521	Violinist
81722	Veneer cutter	21323	Virologist, plant
81722	Veneer cutting lathe operator	21663	Visual effects artist
75219	Veneer dryer tender	23612	Visual teaching aid specialist
81723	Veneer glue spreader	21666	Visualiser
75229	Veneer grader	26523	Vocal group conductor
81722	Veneer machine operator, rotary	26524	Vocalist
81724	Veneer press operator	23300	Vocational education teacher
81723	Veneer sheet gluer		
81859	Ventilation and heating equipment operator		

23300	Vocational education trainer	81419	Watchcase vulcaniser (tyres)
26359	Vocational guidance counsellor	96261	Watchman
23300	Vocational school teacher	81853	Water pumpman
73120	Voicer (organ)	81854	Water treatment plant operator (water works)
21142	Volcanologist	13291	Water works manager
81419	Vulcaniser (rubber goods, except tyres)	83509	Waterman
81419	Vulcaniser, tyre	71249	Waterproofing worker
81419	Vulcaniser, watchcase (tyres)	83329	Water-tank driver
		91170	Waterways cleaner
		73161	Waxer (glass sandblasting)
		81719	Waxing machine operator (papermaking)
		21120	Weather forecaster
		81521	Weaver, axminster
		75299	Weaver, basket
		81521	Weaver, cloth
		81521	Weaver, jacquard
		75299	Weaver, straw
		81521	Weaving machine operator
		81521	Weaving operator (jacquard loom)
		25122	Web developer
		35140	Webmaster
		35140	Website administrator
		35140	Website technician
		33320	Wedding coordinator
		33320	Wedding planner
		75401	Weed controller
		81626	Weigher (sugar confectionery)
		33599	Weights and measures inspector (government)
		72121	Welder
		26359	Welfare officer for the deaf
		26359	Welfare officer for the physically handicapped
		34129	Welfare support worker
		26351	Welfare worker
		26353	Welfare worker, mental
		26351	Welfare worker, prison
		26351	Welfare worker, social
		81132	Well borer (except oil and gas)
		71144	Well cementer (oil and gas)
		81132	Well driller (water well)
		81132	Well driller and borer (except oil and gas wells)
		72155	Well drilling rigger, oil and gas
		81139	Well puller (oil and gas wells)
		14326	Wellness centre manager
		81712	Wet-end machine operator (papermaking)
		62220	Whaler crewman
		31599	Wharf superintendent
		31599	Wharfinger

## W

43114	Wages clerk
40000	Wages section supervisor
51312	Waiter (general)
51311	Waiter supervisor
51311	Waiter, head
51312	Waiter, railway dining car
51312	Waiter, wine
71220	Wall tiler
71312	Wallpaper hanger
81841	Wallpaper printer
54199	Warden, game or bird sanctuary
54130	Warden, prison
54199	Warden, wild life
43212	Warehouse clerk
93334	Warehouse porter
13241	Warehousing department manager
13241	Warehousing manager
81522	Warp knitting machine operator
91210	Washer (laundry service)
81319	Washer operator (chemical and related processes)
91220	Washer, car
75119	Washer, carcass
81543	Washer, cloth (textile making)
91152	Washer, dish
81543	Washer, textile
91220	Washer, vehicle
81543	Washer, yarn
81830	Washing machine operator, bottle
96000	Waste and recyclables collection team leader
96000	Waste collection supervisor
81859	Waste incineration plant operator
81319	Waste treatment operator (radio-active materials)
83326	Waste truck driver
73111	Watch and clock assembler
73112	Watch and clock repairer

93331	Wharfman (docker)	81739	Wood lathe setter-operator
81319	White lead maker	71151	Wood mast and spar maker
71329	Whitewasher	75229	Wood pattern-maker
14204	Wholesale merchant (working proprietor)	81739	Wood planing machine operator
14202	Wholesale trade manager	81739	Wood planing machine setter-operator
52202	Wholesale trade salesman	81732	Wood sawyer, precision
14204	Wholesaler (working proprietor)	75211	Wood seasoning worker
75291	Wicker furniture maker	81739	Wood shaping machine operator
51419	Wig dresser	81739	Wood shaping machine setter-operator
75409	Wig maker	81729	Wood shavings machine operator
34409	Wild animal trainer (circus)	71151	Wood shipwright
51942	Wild animal trainer (zoo)	75212	Wood treating worker
54199	Wild life warden	81739	Wood turner
83431	Winch operator	81739	Wood turning lathe operator
81512	Winder, thread and yarn	75222	Wooden furniture finisher
81512	Winding machine operator (thread and yarn)	75229	Wooden model maker
91230	Window cleaner	75229	Wooden sandals maker
34323	Window display designer	75229	Wooden tank maker
34324	Window dresser	73120	Woodwind instrument maker
71199	Window frame installer (non-wood)	81731	Woodworking machine operator (general)
71151	Window frame installer (wood)	81731	Woodworking machine setter-operator (general)
71290	Window grills installer	72339	Woodworking machinery fitter
81679	Wine blender	72339	Woodworking machinery fitter-assembler
81679	Wine clarifier	72333	Woodworking machinery mechanic
51312	Wine steward	75229	Woodworking marker
75159	Wine taster	75390	Wool scourer
51312	Wine waiter	21419	Work study engineer
81243	Wire coating machine operator	31179	Work study technician
81231	Wire drawer	12193	Working proprietor (administrative service)
72229	Wire goods maker	13102	Working proprietor (agriculture)
71149	Wire mesh worker, reinforcing (concrete)	14391	Working proprietor (arts)
81243	Wire plater (machine)	14123	Working proprietor (bar)
35215	Wire recording equipment operator	14112	Working proprietor (boarding house)
74131	Wireman, electric power (overhead)	12193	Working proprietor (business service)
74139	Wireman, electric power (underground)	14123	Working proprietor (cafe)
74131	Wireman, electric traction (overhead)	14123	Working proprietor (cafeteria)
74223	Wireman, telephone and telegraph	14123	Working proprietor (canteen)
51411	Women's hairdresser	14123	Working proprietor (coffee shop)
34129	Women's shelter worker	13305	Working proprietor (communications)
75229	Wood bender	13491	Working proprietor (community services)
71220	Wood block floor layer		
71151	Wood boatbuilder		
75229	Wood grader		
81711	Wood grinder		
75212	Wood impregnator		

- 13232 Working proprietor (construction)  
 13245 Working proprietor (courier)  
 13491 Working proprietor (financial services)  
 13102 Working proprietor (fisheries)  
 14112 Working proprietor (guest-house)  
 14112 Working proprietor (hotel)  
 13491 Working proprietor (household service)  
 14204 Working proprietor (import and export)  
 13305 Working proprietor (information and communications technology services)  
 14112 Working proprietor (inn)  
 14112 Working proprietor (lodging house)  
 13212 Working proprietor (manufacturing)  
 14112 Working proprietor (motel)  
 14391 Working proprietor (nightclub)  
 13491 Working proprietor (personal service)  
 12193 Working proprietor (real estate)  
 14391 Working proprietor (recreation)  
 14123 Working proprietor (restaurant)  
 14203 Working proprietor (retail trade)  
 14123 Working proprietor (self-service restaurant)  
 14123 Working proprietor (snack-bar)  
 13491 Working proprietor (social services)  
 14391 Working proprietor (sports)  
 13245 Working proprietor (storage)  
 13245 Working proprietor (transport)  
 14204 Working proprietor (wholesale trade)  
 21493 Workplace safety and health manager  
 13211 Works manager (production department)  
 72311 Workshop mechanic (automobile)  
 93201 Wrapper, hand  
 81439 Wrapping machine operator (cardboard box covering)  
 71192 Wrecker, building  
 34210 Wrestler  
 26411 Writer  
 26419 Writer, continuity  
 26421 Writer, feature  
 44199 Writer, letter  
 26419 Writer, lyric  
 44199 Writer, petition  
 26419 Writer, scenario  
 26412 Writer, script  
 26411 Writer, short-story  
 26414 Writer, technical
- X**
- 73219 Xerography cameraman (offset printing)  
 81320 X-ray film developer  
 32112 X-ray technician, medical  
 73120 Xylophone maker
- Y**
- 83509 Yacht crewman  
 31529 Yacht skipper  
 83121 Yard coupler (railway)  
 83129 Yardmaster, railway  
 81512 Yarn doubler  
 81542 Yarn dyer  
 81511 Yarn spinner  
 81512 Yarn twister  
 81543 Yarn washer  
 81512 Yarn winder  
 81679 Yeast maker  
 14111 Youth hostel manager  
 34129 Youth leader  
 36209 Youth leadership teacher  
 53114 Youth residential care assistant  
 34121 Youth worker
- Z**
- 81242 Zinc dipper  
 51132 Zoo guide  
 51942 Zoo keeper  
 21313 Zoologist  
 31419 Zoology technician



# SSOC 2015 Working Group

**Singapore Department of Statistics**

Mr Tang Hsiu Chin (Director, Policy Planning Division)

Mrs Sally Lim (Deputy Director, Policy Planning Division)

Mr Chiou Shi Jian (Deputy Director, Policy Planning Division)

Mr Khoo Soon Lee (Deputy Director, Business Statistics Division)

Mr Wong Chiong Hien (Senior Assistant Director, Income, Expenditure and Population Statistics Division)

Ms Koh Wee Ling (Senior Assistant Director, Income, Expenditure and Population Statistics Division)

Ms Yong Ai Ling Alice (Assistant Director, Policy Planning Division)

Ms Chan Heng Wei (Assistant Director, Income, Expenditure and Population Statistics Division)

Ms Elma Chan (Assistant Director, Economic Accounts Division)

**Ministry of Health**

Mrs Genedine Lim (Assistant Director, Health Information Division)

**Ministry of Manpower**

Mr Tan Yih Bin (Deputy Director, Manpower Research and Statistics Department)

Mr Jonathan Ong (Senior Assistant Director, Manpower Research and Statistics Department)

Mr Fang Shun Wu (Senior Assistant Director, Statistics and Data Administration Group)

**Central Provident Fund Board**

Ms Jessica Fang (Manager, Management Information Department)

**Economic Development Board**

Mr Quin Chong (Assistant Head, Research and Statistics Unit)

**Infocomm Development Authority**

Ms Chen Yanli (Manager, Research and Statistics Unit)

**Institute of Technical Education**

Mr Jason Chua (Manager, Manufacturing Services Curriculum)

**Monetary Authority of Singapore**

Ms Janice Hu (Deputy Director, Financial Centre Development Department)

Ms Lynna Wong (Senior HR Manager, Human Resource Department)

Mr Marcus Fum (Senior Economist, Economic Surveillance & Forecasting Department)

**Public Service Division**

Mr Eugene Chua (Assistant Director, Strategic Planning and Research)

**Workforce Development Agency**

Ms Angela Tan (Deputy Director, Strategic Planning Division)

Mr Cui Shaowen (Assistant Director, Strategic Planning Division)

## SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES

### Statistics Singapore Website

The *Statistics Singapore Website* was launched by the Singapore Department of Statistics (DOS) in January 1995. Internet users can access the website by connecting to:

**<http://www.singstat.gov.sg>**

Key Singapore statistics are available via the following sections:

- **Statistics**  
which provides access to the latest statistical findings of DOS as well as statistics compiled by Research and Statistics Units (RSUs) in ministries and statutory boards.
- **News**  
which provides a listing of the news released by DOS and RSUs.
- **Publications**  
which presents the latest editions of DOS' publications, papers and articles.
- **Browse by Themes**  
which presents official statistics compiled by DOS and RSUs in the various ministries and statutory boards according to themes. Within each theme, relevant statistics and related press releases, publications and references are provided.

Statistical resources are available via:

- **Publication and Papers**  
which lists the latest editions of publications released by DOS according to statistical domains at <http://www.singstat.gov.sg/publications/publications-and-papers>. All softcopy DOS publications are available for free downloading. Statistical tables of DOS publications in Excel format are also available.
- **Advance Release Calendar**  
which provides a six months ahead advance release calendar of key statistical indicators.

The website also provides a convenient gateway to international statistical websites under the "Methodologies & Standards" section:

- **Guide to International Statistics**  
which provides hyperlinks to international databases and classifications, as well as websites of international bodies and other national statistical offices.
- **IMF Dissemination Standards Bulletin Board**  
which provides metadata about Singapore's key indicators in the real, fiscal, financial and external sectors, including dissemination practices and information about pre-release access of current indicators.

### SingStat Express

*SingStat Express* is a personalised data delivery service which sends the latest press releases, notices of publication, newsletter, occasional and information papers to subscribers via email. SMS alert service is also available to local users. Subscription details are available from the *Statistics Singapore Website* (<http://www.singstat.gov.sg/express>).

**SINGAPORE DEPARTMENT OF STATISTICS  
INFORMATION DISSEMINATION SERVICES (cont'd)**

**Really Simple Syndication**

*Really Simple Syndication (RSS)* is an easy way to stay updated on the latest statistical news released via the *Statistics Singapore Website*. The SingStat RSS feed delivers statistical news highlights and hyperlinks to the source documents whenever the updates are posted. More information is available at [http://www.singstat.gov.sg/services/really-simple-syndication-\(rss\)](http://www.singstat.gov.sg/services/really-simple-syndication-(rss)).

**SingStat Mobile App**

*SingStat Mobile App* provides users with ready access to the latest key Singapore official statistics through their mobile devices while on the go. Users may visualize data for the latest periods with some 200 charts of commonly used statistics from 25 data categories. The app is available for downloading in iOS and Android devices. More information is available at <http://www.singstat.gov.sg/services/singstat-mobile-app>

**SingStat Table Builder**




The *SingStat Table Builder* contains statistical data series on the Singapore economy and population for users to create customised data tables, plot graphs and charts and export them in different file formats. Explore data trends with this e-service at <http://www.singstat.gov.sg/tablebuilder>.

**E-survey**

The *E-survey* enables business organisations to complete and submit their survey forms through the internet. Using secured encryption protocols, the *E-survey* ensures that the information transmitted through the net is secured and protected. The system features online helps and validation checks to assist respondents in completing their survey forms. With the *E-survey*, respondents do away with the tedious paper work and manual tasks of mailing or faxing their survey returns to the Department.

***Statistical Enquiries and Feedback***

If you have any statistical enquiries or comment or suggestions on our statistical publications and electronic services, you are welcomed to:

-  E-mail us at **info@singstat.gov.sg**
-  Fax to us at **(65) 6332-7689**
-  Call us at **1800-3238118\* (local callers)**

**(65) 6332-7738 (overseas callers)**

\* Calls from mobile telephone lines to 1800 local toll free number may be subject to mobile airtime charges as imposed by the relevant mobile service provider.