



# Singapore Standard Occupational Classification

2010



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**SINGAPORE STANDARD OCCUPATIONAL CLASSIFICATION 2010**

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## 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 2010 is the sixth version of the SSOC and supersedes earlier versions. 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. A comparison table of SSOC 2005 and SSOC 2010 up to the unit group level is also included to facilitate better understanding of the changes.

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

February 2010

## 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.**

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|  |   |
|--|---|
| <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>  |

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## SINGAPORE STANDARD OCCUPATIONAL CLASSIFICATION 2010

### 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 economic, technological and organisational changes which tend to bring about emergence of new types of work as well as redundancy of some existing jobs.

2 The SSOC 2010 adopts the basic framework of the International Standard Classification of Occupations 2008 (ISCO-08) with appropriate modifications to take into account changes in Singapore's employment landscape while enhancing international comparability. It replaces the SSOC 2005 which was based on ISCO-88.

### Scope of the Classification

3 The SSOC 2010 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, but with provisions for the collective classification of those in the armed services and the foreign diplomatic personnel. 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 2010 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 irrespective of work experience, skills and qualifications.

5 In defining the broad types of work in the SSOC 2010, 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**, which is 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 basically 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 2010 comprises five levels of aggregation, namely 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 Professionals, Clerical Support Workers and Craftsmen, etc, and Major Group X. They are each identified by their corresponding one-digit or -alphabetical code, i.e. 1, 2, 3, 4, 5, 6, 7, 8, 9 or X as the case may be.

**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 skills level associated with each major occupational group are indicated as follows:

- a Occupations in Major Group 2 'Professionals' require the fourth skill level as defined earlier.
- b Occupations in Major Group 3 'Associate Professionals and Technicians' require the third skill level as defined earlier.
- c Occupations in Major Groups 4 'Clerical Support Workers', 5 'Service and Sales Workers', 6 'Agricultural and Fishery Workers', 7 'Craftsmen

and Related Trades Workers’, and 8 ‘Plant and Machine Operators and Assemblers’ require the second skill level as defined earlier.

- d Occupations in Major Group 9 ‘Cleaners, Labourers and Related Workers’ require the first skill level as defined earlier.

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. These aspects are such that 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, which would be difficult to relate it to any one of the four broad skills levels.

11 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          | 33         | 71           | NA              |
| 2 Professionals                              | 7               | 26          | 78         | 228          | 4 <sup>th</sup> |
| 3 Associate Professionals and Technicians    | 7               | 27          | 84         | 251          | 3 <sup>rd</sup> |
| 4 Clerical Support Workers                   | 5               | 9           | 22         | 57           | 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          | 17           | 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          | 58         | 182          | 2 <sup>nd</sup> |
| 9 Cleaners, Labourers and Related Workers    | 5               | 11          | 21         | 56           | 1 <sup>st</sup> |
| X Workers not Classifiable by Occupation     | -               | -           | -          | 5            | NA              |
| <b>Total</b>                                 | <b>43</b>       | <b>140</b>  | <b>400</b> | <b>1,122</b> |                 |

12 A numerical five-digit coding system is used to distinguish the different levels of classification. The numbering system is hierarchical in nature, showing progressively finer detail in skill specialisation from the highest level of aggregation (one-digit) to the lowest level (five-digit). This allows users the flexibility to tabulate, analyse and publish data according to the level of detail required.

| <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<br>(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       |

13 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).

14 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 of detail. 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.

15 The numerical codes of SSOC 2010 are closely aligned with ISCO-08 to facilitate easy 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 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*

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 and Van 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 (unless either of these associated tasks and duties dominates). For example, a worker who bakes bread and pastries and then sells them should be classified as a baker and not a sales worker.

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

18 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 more appropriate to their job duties and scope of work.

### *Working Proprietors*

19 Working proprietors generally 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 2005

20 A comparison of the major groups in SSOC 2010 and SSOC 2005 is shown in the following table. While the number of major groups remains unchanged at ten in SSOC 2010, the descriptions of a few major groups have been amended to better reflect existing norms.

| SSOC 2010 |  | SSOC 2005 |   |
|-----------|--|-----------|---|
| 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 Workers                                  |
| 5         | Service and Sales Workers                  | 5         | Service Workers and Shop and Market Sales Workers |
| 6         | Agricultural and Fishery Workers           | 6         | Agricultural and Fishery Workers                  |
| 7         | Craftsmen and Related Trades Workers       | 7         | Production Craftsmen and Related 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 Classifiable by Occupation     | X         | Workers not Classifiable by Occupation            |

21 The number of sub-major (two-digit), minor (three-digit) and unit (four-digit) groups has increased 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 2010 | SSOC 2005 |
|-----------------------------|-----------|-----------|
| Sub-Major Group (two-digit) | 43        | 32        |
| Minor Group (three-digit)   | 140       | 119       |
| Unit Group (four-digit)     | 400       | 317       |
| Occupation (five-digit)     | 1,122     | 999       |

22 The more significant new sub-major groups in SSOC 2010 are shown in the table below. A comparison between SSOC 2010 and 2005 down to the unit group level is presented in the Appendix.

| Major Group                                  | Sub-Major Group |   |
|--|-----------------|---|
| 1 Legislators, Senior Officials and Managers | 12              | Administrative and Commercial Managers                  |
|  | 13              | Production and Specialised Services Managers            |
|  | 14              | Hospitality and Related Services Managers               |
| 2 Professionals                              | 22              | Health Professionals                                    |
|  | 25              | Information and Communications Technology Professionals |
| 3 Associate Professionals and Technicians    | 32              | Health Associate Professionals                          |
|  | 35              | Information and Communications Technicians              |
| 4 Clerical Support Workers                   | 41              | General and Keyboard Clerks                             |
|  | 43              | Numerical and Material Recording Clerks                 |
| 5 Service and Sales Workers                  | 51              | Personal Service Workers                                |
|  | 53              | Personal Care Workers                                   |
|  | 54              | Protective Service Workers                              |
| 7 Craftsmen and Related Trades Workers       | 74              | Electrical and Electronic Trades Workers                |

23 In Major Group 1 'Legislators, Senior Officials and Managers', the five-digit codes for general managers, which were previously differentiated by industry, have been consolidated into a single code, similar to other senior management occupations like managing director and chief executive officer. The sub-major group of working proprietors has been removed in SSOC 2010. The various five-digit codes for working proprietors have been regrouped with managers whose job duties are relatively similar (e.g. construction working proprietor with building and construction project manager, manufacturing working proprietor with manufacturing plant and production manager).

24 The previous sub-major group 'Corporate Managers' has been split into three sub-major groups i.e. 'Administrative and Commercial Managers', 'Production and Specialised Services Managers' and 'Hospitality, Retail and related Services Managers', allowing for the identification of the different types of management work, e.g. policy and planning managers, call centre managers, education managers, child care services managers, aged care service managers, financial and insurance services managers, casino operations managers and amusement/theme park managers.

25 In Major Group 2 'Professionals', health and information and communications technology (ICT) professionals is elevated from three-digit groups to two-digit sub-major groups. For ICT professionals, this enables a larger variety of occupations to be identified, with the number of four-digit groups for such professionals increasing from four in SSOC 2005 to 11 in SSOC 2010. For health professionals, medical doctors, which used to be classified within a single unit group, can now be classified under four distinct unit groups i.e. one for generalist medical practitioners and three for specialist medical practitioners (medical, surgical and other specialisations).

26 A new three-digit group 'Electrotechnology Engineers' has been created to separately group electrical, electronics and telecommunications engineers, which were previously classified in the same three-digit group as other engineers like civil engineers, mechanical engineers and chemical engineers. At the five-digit level, unique codes have been created for occupations such as environment research scientist, medical scientist, management consultant, human resource consultant, advertising creative director, IT business process consultant, web developer, database architect and the various types of specialist medical doctors.

27 Like their counterparts in Major Group 2 'Professionals', health associate professionals and information and communications technicians have also been elevated to two-digit sub-major groups in Major Group 3 'Technicians and Associate Professionals', allowing for a more detailed breakdown for such occupations. The new occupations in Major Group 3 include food science technician, dental health therapist, audiologist, podiatrist, credit and loans officers, business development executive, legal associate professional, landscape designer, multimedia designer and website administrator.

28 In Major Group 4 'Clerical Support Workers', the previous sub-major group 'Office Clerks' has been split into two sub-major groups, namely 'General and Keyboard Clerks' and 'Numerical and Material Recording Clerks'. In Major Group 5 'Service and Sales Workers', the previous sub-major group 'Service Workers' is split into three sub-major groups i.e. 'Personal Service Workers', 'Personal Care Workers' and 'Protective Service Workers'. Other significant structural changes include the creation of a separate sub-major group for electrical and electronic trades workers' in Major Group 7 'Craftsmen and Related Trades Workers' and the expansion of the sub-major group for stationary plant operators to include machine operators in Major Group 8 'Plant and Machine Operators and Assemblers'.

29 For the above major groups, new five-digit codes created include purchasing clerk, bank operations clerk, theme park guide, chef, waiter supervisor, slimming consultant, croupier, child/after school care centre worker, teachers' aide and healthcare assistant.

# Classification of Occupations

| SSOC 2010 | OCCUPATION  | SSOC 2005   |
|-----------|---|---|
| <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  | 11100   |
| 1112      | <u>Senior Government and Statutory Board Officials</u>                                    |   |
| 11121     | Senior government official  | 11201   |
| 11122     | Senior statutory board official   | 11202   |
| 1114      | <u>Senior Officials of Political Party Organisations</u>                                  |   |
| 11140     | Senior official of political party organisation   | 11310   |
| 1115      | <u>Senior Officials of Employers', Workers' and Other Economic-Interest Organisations</u> |   |
| 11150     | Senior official of employers', workers' and other economic-interest organisation          | 11320   |
| 1116      | <u>Senior Officials of Humanitarian and Other Special-Interest Organisations</u>          |   |
| 11160     | Senior official of humanitarian and other special-interest organisation                   | 11330   |
| 112       | MANAGING DIRECTORS, CHIEF EXECUTIVES AND GENERAL MANAGERS                                 |   |
| 1120      | <u>Managing Directors, Chief Executives and General Managers</u>                          |   |
| 11201     | Managing director/Chief executive officer   | 12101   |
| 11202     | Company director  | 12102   |
| 11203     | Chief operating officer/General Manager   | 12201,<br>12202,<br>12203,<br>12204,<br>12205,<br>12206,<br>12209 |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| <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)   | 12331           |
| 12112     | Administration manager  | 12332           |
| 1212      | <u>Human Resource Managers</u>  |                 |
| 12121     | Personnel/Human resource manager  | 12341           |
| 12122     | Industrial relations manager  | 12342           |
| 12123     | Training manager  | 12343           |
| 1213      | <u>Policy and Planning Managers</u>   |                 |
| 12130     | Policy and planning manager   | 12399 (part)    |
| 1219      | <u>Business Services and Administration Managers Not Elsewhere Classified</u> |                 |
| 12191     | Premises and facilities maintenance manager                                   | 12392           |
| 12192     | Landscape operations manager  | new item        |
| 12193     | Working proprietor (business services and administrative services)            | 13094 (part)    |
| 12199     | Other business services and administration managers nec                       | 12399 (part)    |
| 122       | SALES, MARKETING, DEVELOPMENT AND CUSTOMER SERVICE MANAGERS                   |                 |
| 1221      | <u>Sales, Marketing and Business Development Managers</u>                     |                 |
| 12211     | Sales and marketing manager   | 12321,<br>12329 |
| 12212     | Business development manager  | 12391           |
| 1222      | <u>Advertising and Public Relations Managers</u>                              |                 |
| 12220     | Advertising/Public relations manager  | 12350           |
| 1223      | <u>Research and Development Managers</u>                                      |                 |
| 12230     | Research and development manager  | 12360           |
| 1224      | <u>Customer Service and Call Centre Managers</u>                              |                 |
| 12241     | Customer service manager  | 12322 (part)    |
| 12242     | Call centre manager   | 12322 (part)    |

| SSOC 2010 | OCCUPATION  | SSOC 2005                     |
|-----------|---|-------------------------------|
| <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   | 12909 (part)                  |
| 13102     | Working proprietor (agriculture and fisheries)  | 13099 (part)                  |
| 132       | MANUFACTURING, CONSTRUCTION, TRANSPORT, DISTRIBUTION AND OTHER PRODUCTION AND OPERATIONS MANAGERS |                               |
| 1321      | <u>Manufacturing Managers</u>   |                               |
| 13211     | Manufacturing plant/production manager  | 12311                         |
| 13212     | Working proprietor (manufacturing)  | 13091                         |
| 1323      | <u>Construction Managers</u>  |                               |
| 13231     | Building and construction project manager   | 12312                         |
| 13232     | Working proprietor (construction)   | 13092                         |
| 1324      | <u>Transport, Supply, Distribution and Related Managers</u>                                       |                               |
| 13241     | Supply and distribution/Logistics/Warehousing manager   | 12316                         |
| 13242     | Procurement/Purchasing manager  | 12315                         |
| 13243     | Transport operations manager  | 12313                         |
| 13244     | Postal service manager  | 12319 (part)                  |
| 13245     | Working proprietor (transport, storage and courier)   | 13093 (part)                  |
| 1329      | <u>Production and Operations Managers Not Elsewhere Classified</u>                                |                               |
| 13291     | Technical/Engineering services manager (eg shipyard manager)                                      | 12319 (part)                  |
| 13292     | Quality assurance manager   | 12314                         |
| 13299     | Other production and operations managers nec (eg mining manager)                                  | 12319 (part)                  |
| 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                         | 21311                         |
| 13302     | Software and applications manager   | 21319 (part)                  |
| 13303     | Network and communications manager  | 21312                         |
| 13304     | IT service manager  | 21319 (part)                  |
| 13305     | Working proprietor (information and communications technology service)                            | 13093 (part),<br>13094 (part) |

| SSOC 2010 | OCCUPATION  | SSOC 2005                     |
|-----------|---|-------------------------------|
| 134       | <b>PROFESSIONAL, FINANCIAL, COMMUNITY AND SOCIAL SERVICES MANAGERS</b>                          |                               |
| 1341      | <u>Child Care Services Managers</u>   |                               |
| 13410     | Child care services manager   | 33110 (part)                  |
| 1342      | <u>Health Services Managers</u>   |                               |
| 13420     | Health services manager   | new item                      |
| 1343      | <u>Aged Care Services Managers</u>  |                               |
| 13430     | Aged care services manager  | new item                      |
| 1344      | <u>Social Welfare Managers</u>  |                               |
| 13440     | Social welfare manager  | new item                      |
| 1345      | <u>Education Managers</u>   |                               |
| 13451     | School principal  | 23910                         |
| 13459     | Other education managers (including registrars and deans of education institutions)             | new item                      |
| 1346      | <u>Financial and Insurance Services Managers</u>  |                               |
| 13460     | Financial/Insurance services manager (eg financial institution branch manager)                  | new item                      |
| 1349      | <u>Professional, Financial, Community and Social Services Managers Not Elsewhere Classified</u> |                               |
| 13491     | Working proprietor (professional, financial, community and social services)                     | 13095 (part),<br>13099 (part) |
| 13499     | Other professional, financial, community and social services managers nec                       | 12909 (part),<br>12399 (part) |
| <b>14</b> | <b>HOSPITALITY, RETAIL AND RELATED SERVICES MANAGERS</b>  |                               |
| 141       | <b>HOTEL AND FOOD AND BEVERAGES SERVICES MANAGERS</b>   |                               |
| 1411      | <u>Hotel Operations and Lodging Services Managers</u>   |                               |
| 14111     | Hotel operations/Lodging services manager   | 12902                         |
| 14112     | Working proprietor (lodging services)   | 13021                         |

| SSOC 2010 | OCCUPATION   | SSOC 2005                     |
|-----------|--|-------------------------------|
| 1412      | <u>Food and Beverages Services Managers</u>                      |                               |
| 14121     | Restaurant manager   | 12903 (part)                  |
|           |  | 12909 (part)                  |
| 14122     | Catering services manager  | 12903 (part)                  |
| 14123     | Working proprietor (restaurant and other catering services)      | 13022                         |
| 142       | RETAIL AND WHOLESALE TRADE MANAGERS                              |                               |
| 1420      | <u>Retail and Wholesale Trade Managers</u>                       |                               |
| 14201     | Retail/Shop sales manager  | 12901                         |
| 14202     | Wholesale trade manager  | 12909 (part)                  |
| 14203     | Working proprietor (retail trade)                                | 13012                         |
| 14204     | Working proprietor (wholesale trade)                             | 13011                         |
| 143       | OTHER SERVICES MANAGERS  |                               |
| 1431      | <u>Sports Centre Managers</u>                                    |                               |
| 14310     | Sports centre manager  | new item                      |
| 1432      | <u>Recreation Centre Managers</u>                                |                               |
| 14321     | Casino operations manager  | new item                      |
| 14322     | Amusement/Theme park manager                                     | 12909 (part)                  |
| 14323     | Cinema manager   | 12909 (part)                  |
| 14324     | Park/Garden/Nature reserve manager                               | new item                      |
| 14325     | Discotheque/Karaoke/Nightclub manager                            | 12909 (part)                  |
| 14329     | Other recreation centre managers                                 | 12909 (part)                  |
| 1433      | <u>Arts and Cultural Centre Managers</u>                         |                               |
| 14330     | Arts and cultural centre manager                                 | new item                      |
| 1439      | <u>Other Services Managers Not Elsewhere Classified</u>          |                               |
| 14391     | Working proprietor (sports, recreation, arts and other services) | 13095 (part)                  |
| 14399     | Other services managers nec                                      | 12399 (part),<br>12909 (part) |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| <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   | 21191        |
| 21142     | Geophysicist  | 21192        |
| 21149     | Other physical science professionals                                      | 21199 (part) |
| 212       | MATHEMATICIANS, ACTUARIES AND STATISTICIANS                               |              |
| 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  | 21221        |
| 213       | LIFE SCIENCE PROFESSIONALS  |              |
| 2131      | <u>Biologists, Botanists, Zoologists and Related Professionals</u>        |              |
| 21311     | Biologist (general)   | 22111        |
| 21312     | Botanist  | 22112        |
| 21313     | Zoologist   | 22113        |
| 21319     | Other biologists, botanists, zoologists and related professionals         | 22119 (part) |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 2132      | <u>Farming, Forestry and Fishery Advisers</u>                  |              |
| 21321     | Agronomist   | 22131        |
| 21322     | Horticulturist/Arborist  | 22132        |
| 21323     | Plant pathologist  | 22133        |
| 21324     | Soil scientist   | 22134        |
| 21325     | Floriculturist/Orchidologist                                   | 22135        |
| 21326     | Plant tissue culturist   | 22136        |
| 21327     | Aquaculturist  | new item     |
| 21329     | Other farming, forestry and fishery advisers                   | 22139        |
| 2133      | <u>Environmental Protection and Related Professionals</u>      |              |
| 21331     | Environmental officer (environmental protection)               | 31621 (part) |
| 21332     | Environment research scientist (eg ecologist)                  | new item     |
| 21333     | Energy manager   | new item     |
| 21339     | Other environmental protection and related professionals       | 22119 (part) |
| 2134      | <u>Pharmacologists and Related Professionals</u>               |              |
| 21341     | Pharmacologist   | 22126        |
| 21342     | Anatomist  | 22121        |
| 21343     | Biochemist   | 22122        |
| 21344     | Physiologist   | 22123        |
| 21345     | Animal scientist   | 22127        |
| 21346     | Medical scientist  | new item     |
| 21349     | Other pharmacologists and related professionals                | 22129        |
| 214       | <b>ENGINEERING PROFESSIONALS (EXCLUDING ELECTROTECHNOLOGY)</b> |              |
| 2141      | <u>Industrial and Production Engineers</u>                     |              |
| 21411     | Manufacturing engineer (general)                               | 21471        |
| 21412     | Production engineer  | 21472        |
| 21413     | Automation engineer  | 21473        |
| 21414     | Quality control/assurance engineer                             | 21479 (part) |
| 21419     | Other industrial and production engineers                      | 21479 (part) |
| 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                                  | 21425        |
| 21429     | Other civil engineers  | 21429        |
| 2143      | <u>Environmental Engineers</u>                                 |              |
| 21431     | Environmental engineer   | 21493 (part) |
| 21432     | Sewerage/Sanitary engineer                                     | 21424        |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 2144      | <u>Mechanical Engineers</u>                                      |              |
| 21441     | Mechanical engineer (general)                                    | 21451        |
| 21442     | Industrial machinery and tools engineer                          | 21452        |
| 21443     | Marine engineer (shore-based)                                    | 21453        |
| 21444     | Naval architect  | 21454        |
| 21445     | Aeronautical engineer  | 21455        |
| 21446     | Automotive engineer  | 21456        |
| 21447     | Air-conditioning/Refrigeration engineer                          | 21457        |
| 21449     | Other mechanical engineers                                       | 21459        |
| 2145      | <u>Chemical Engineers</u>  |              |
| 21451     | Chemical engineer (general)                                      | 21461        |
| 21452     | Chemical engineer (petroleum)                                    | 21462        |
| 21453     | Chemical engineer (petrochemicals)                               | 21463        |
| 21459     | Other chemical engineers   | 21469        |
| 2146      | <u>Mining Engineers, Metallurgists and Related Professionals</u> |              |
| 21461     | Petroleum/Natural gas engineer                                   | 21494        |
| 21462     | Metallurgist   | 21495        |
| 21469     | Other mining engineers, metallurgists and related professionals  | 21499 (part) |
| 2149      | <u>Engineering Professionals Not Elsewhere Classified</u>        |              |
| 21491     | Biomedical engineer  | 21491        |
| 21492     | Materials engineer   | 21492        |
| 21493     | Industrial safety engineer                                       | 21493 (part) |
| 21494     | Quantity surveyor  | 21496        |
| 21495     | Ceramics/Glass technologist                                      | 21497        |
| 21496     | Food and drink technologist                                      | 21498        |
| 21499     | Other engineering professionals nec                              | 21499 (part) |
| 215       | <b>ELECTROTECHNOLOGY ENGINEERS</b>                               |              |
| 2151      | <u>Electrical Engineers</u>                                      |              |
| 21511     | Electrical engineer (general)                                    | 21431        |
| 21512     | Power generation and distribution engineer                       | 21432        |
| 21513     | Lift engineer  | 21433        |
| 21519     | Other electrical engineers                                       | 21439        |
| 2152      | <u>Electronics Engineers</u>                                     |              |
| 21521     | Electronics engineer (general)                                   | 21441        |
| 21522     | Computer engineer  | 21443        |
| 21523     | Semi-conductor engineer  | 21444        |
| 21524     | Audio and video equipment engineer                               | 21445        |
| 21525     | Instrumentation engineer   | 21446        |
| 21526     | Embedded systems engineer  | new item     |
| 21529     | Other electronics engineers                                      | 21449        |

| SSOC 2010 | OCCUPATION  | SSOC 2005                     |
|-----------|---|-------------------------------|
| 2153      | <u>Telecommunications Engineers</u>   |                               |
| 21530     | Telecommunications engineer   | 21442                         |
| 216       | ARCHITECTS, PLANNERS AND SURVEYORS  |                               |
| 2161      | <u>Building Architects</u>  |                               |
| 21610     | Building architect  | 21411                         |
| 2162      | <u>Landscape Architects</u>   |                               |
| 21620     | Landscape architect   | 21413                         |
| 2164      | <u>Town and Related Planners</u>  |                               |
| 21641     | Town planner  | 21412                         |
| 21649     | Other related planners (eg traffic planner)   | 21419                         |
| 2165      | <u>Surveyors and Cartographers</u>  |                               |
| 21651     | Surveyor (general)  | 21481                         |
| 21652     | Land surveyor   | 21482                         |
| 21653     | Hydrographic surveyor   | 21483                         |
| 21654     | Cartographer  | 21489 (part)                  |
| 21659     | Other surveyors and cartographers   | 21489 (part)                  |
| <b>22</b> | <b>HEALTH PROFESSIONALS</b>   |                               |
| 221       | MEDICAL DOCTORS   |                               |
| 2211      | <u>Generalist Medical Practitioners</u>   |                               |
| 22110     | General practitioner/physician  | 22211                         |
| 2212      | <u>Specialist Medical Practitioners (Medical)</u>   |                               |
| 22121     | Cardiologist  | 22218 (part)                  |
| 22122     | Dermatologist   | 22218 (part)                  |
| 22123     | Gastroenterologist  | 22218 (part)                  |
| 22124     | Internal medicine physician   | 22218 (part)                  |
| 22125     | Medical oncologist  | 22218 (part)                  |
| 22126     | Paediatrician   | 22217                         |
| 22127     | Respiratory physician   | 22218 (part)                  |
| 22128     | Psychiatrist  | 22215                         |
| 22129     | Other specialist medical practitioners (medical) (eg endocrinologist, geriatrician, haematologist, infectious diseases physician, neurologist, nuclear medicine physician, rehabilitation physician, renal physician, rheumatologist) | 22218 (part),<br>22219 (part) |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| 2213      | <u>Specialist Medical Practitioners (Surgical)</u>  |                 |
| 22131     | General surgeon   | 22212           |
| 22132     | Cardiothoracic surgeon  | 22213 (part)    |
| 22133     | Hand surgeon  | 22213 (part)    |
| 22134     | Neurosurgeon  | 22213 (part)    |
| 22135     | Orthopaedic surgeon   | 22213 (part)    |
| 22136     | Paediatric surgeon  | 22213 (part)    |
| 22137     | Plastic surgeon   | 22213 (part)    |
| 22138     | Urologist   | 22213 (part)    |
| 22139     | Other specialist medical practitioners (surgical)   | 22213 (part)    |
| 2214      | <u>Specialist Medical Practitioners (Other Specialisations)</u>   |                 |
| 22141     | Anaesthesiologist   | 22214           |
| 22142     | Diagnostic radiologist  | 22219 (part)    |
| 22143     | Emergency physician   | 22218 (part)    |
| 22144     | Obstetrician/Gynaecologist  | 22216           |
| 22145     | Ophthalmologist   | 22213 (part)    |
| 22146     | Pathologist   | 22124           |
| 22147     | Public Health Physician   | 22218 (part)    |
| 22148     | Otorhinolaryngologist/Ear, nose, throat (ENT) surgeon   | 22213 (part)    |
| 22149     | Other specialist medical practitioners (other specialisations)<br>(eg occupational physician, radiation oncologist) | 22219 (part)    |
| 223       | TRADITIONAL AND COMPLEMENTARY MEDICINE PROFESSIONALS  |                 |
| 2230      | <u>Traditional and Complementary Medicine Professionals</u>   |                 |
| 22301     | Traditional chinese medicine physician  | 32314           |
| 22302     | Traditional chinese medicine acupuncturist  | 32315           |
| 225       | VETERINARIANS   |                 |
| 2250      | <u>Veterinarians</u>  |                 |
| 22500     | Veterinarian  | 22125,<br>22230 |
| 226       | OTHER HEALTH PROFESSIONALS  |                 |
| 2261      | <u>Dentists</u>   |                 |
| 22611     | Dentist (general)   | 22221           |
| 22612     | Specialised dentist (eg orthodontist)   | 22222           |
| 2262      | <u>Pharmacists</u>  |                 |
| 22621     | Pharmacist (dispensing)   | 22241           |
| 22629     | Other pharmacists   | 22249           |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 2263      | <u>Environmental and Occupational Health and Hygiene Professionals</u> |              |
| 22631     | Occupational health professional                                       | 21493 (part) |
| 22632     | Environmental officer (public health)                                  | 31621 (part) |
| 22639     | Other environmental and occupational health and hygiene professionals  | 21493 (part) |
| 2269      | <u>Other Health Professionals Not Elsewhere Classified</u>             |              |
| 22690     | Other health professionals nec   | 22290        |
| <b>23</b> | <b>TEACHING 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        |
| 23109     | Other university, polytechnic and higher education teachers            | 23109        |
| 232       | VOCATIONAL EDUCATION TEACHERS  |              |
| 2320      | <u>Vocational Education Teachers</u>                                   |              |
| 23200     | Technical/Vocational/Commercial education institute teacher            | 23202        |
| 233       | SECONDARY EDUCATION TEACHERS   |              |
| 2330      | <u>Secondary Education Teachers</u>                                    |              |
| 23300     | Pre-university (including junior college) and secondary school teacher | 23201        |
| 234       | PRIMARY EDUCATION TEACHERS   |              |
| 2340      | <u>Primary School Teachers</u>   |              |
| 23400     | Primary school teacher   | 23300        |
| 235       | OTHER TEACHING PROFESSIONALS   |              |
| 2351      | <u>Education Methods Specialists</u>                                   |              |
| 23511     | Education methods adviser  | 23921        |
| 23512     | Teaching aid specialist (including audio-visual aid specialist)        | 23922        |
| 23519     | Other education methods specialists                                    | 23929        |

| SSOC 2010 | OCCUPATION   | SSOC 2005              |
|-----------|--|------------------------|
| 2352      | <u>Special Education Teachers</u>  |                        |
| 23521     | Teacher of the blind   | 23401                  |
| 23522     | Teacher of the deaf  | 23402                  |
| 23523     | Teacher of the mentally handicapped  | 23403                  |
| 23529     | Other special education teachers   | 23409                  |
| 2359      | <u>Other Teaching Professionals Not Elsewhere Classified</u>                         |                        |
| 23590     | Other teaching professionals nec   | 23990                  |
| <b>24</b> | <b>BUSINESS AND ADMINISTRATION PROFESSIONALS</b>                                     |                        |
| 241       | FINANCE PROFESSIONALS  |                        |
| 2411      | <u>Accountants</u>   |                        |
| 24111     | Accountant   | 24101                  |
| 24112     | Auditor (accounting)   | 24102                  |
| 2412      | <u>Financial and Investment Advisers</u>   |                        |
| 24120     | Financial/Investment adviser   | 24909 (part)           |
| 2413      | <u>Financial Analysts and Related Professionals</u>                                  |                        |
| 24131     | Financial analyst (eg equities analyst, credit analyst)                              | 24201 (part),<br>24202 |
| 24132     | Risk analyst (financial)   | 24201 (part)           |
| 24133     | Fund manager   | 24203                  |
| 24134     | Treasury manager   | 24204                  |
| 24139     | Other financial analysts and related professionals (eg financial product structurer) | 24209                  |
| 242       | ADMINISTRATION PROFESSIONALS   |                        |
| 2421      | <u>Management and Business Consultants</u>   |                        |
| 24211     | Management consultant  | 24909 (part)           |
| 24212     | Business consultant  | 24909 (part)           |
| 2422      | <u>Policy Administration Professionals</u>   |                        |
| 24220     | Policy administration professional (eg policy analyst)                               | 24909 (part)           |
| 2423      | <u>Human Resource Professionals</u>  |                        |
| 24231     | Human resource consultant (excluding executive search consultant)                    | 24909 (part)           |
| 24232     | Executive search consultant  | 24909 (part)           |

| SSOC 2010 | OCCUPATION  | SSOC 2005              |
|-----------|---|------------------------|
| 243       | MARKETING AND PUBLIC RELATIONS PROFESSIONALS                                      |                        |
| 2431      | <u>Advertising and Marketing Professionals</u>                                    |                        |
| 24311     | Creative director (advertising)   | 39539 (part)           |
| 24312     | Market research analyst   | 24901                  |
| 2432      | <u>Public Relations Professionals</u>   |                        |
| 24320     | Public relations consultant and related professional                              | 24909 (part)           |
| <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  | 21321,<br>21322 (part) |
| 25112     | IT business process consultant/business analyst                                   | 21399 (part)           |
| 2512      | <u>Software, Web and Multimedia Developers</u>                                    |                        |
| 25121     | Software developer  | 21323                  |
| 25122     | Web developer   | new item               |
| 25123     | Multimedia (including computer games) developer                                   | 21333                  |
| 2514      | <u>Applications and Systems Programmers</u>                                       |                        |
| 25140     | Applications/Systems programmer   | 21331,<br>21332        |
| 2515      | <u>Information Technology Testing and Quality Assurance Professionals</u>         |                        |
| 25151     | Information technology testing/quality assurance specialist                       | 21393                  |
| 25152     | Information technology auditor  | 21391                  |
| 2516      | <u>Information Technology Project Managers</u>                                    |                        |
| 25160     | Information technology project manager  | 21319 (part)           |
| 2519      | <u>Software and Applications Developers and Analysts Not Elsewhere Classified</u> |                        |
| 25190     | Software and applications developer and analyst nec                               | 21399 (part)           |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 252       | <b>DATABASE AND NETWORK PROFESSIONALS</b>                          |              |
| 2521      | <u>Database Designers and Administrators</u>                       |              |
| 25211     | Database administrator   | 21342        |
| 25212     | Database architect   | new item     |
| 2522      | <u>Network and Computer Systems Administrators</u>                 |              |
| 25220     | Network/Computer systems administrator                             | 21341        |
| 2523      | <u>Computer Network Professionals</u>                              |              |
| 25230     | Network/Infrastructure architect and engineer                      | 21322 (part) |
| 2524      | <u>Information Technology Security Specialists</u>                 |              |
| 25240     | Information technology security specialist                         | 21392        |
| 2529      | <u>Database and Network Professionals Not Elsewhere Classified</u> |              |
| 25290     | Database and network professional nec                              | 21399 (part) |
| <b>26</b> | <b>LEGAL, SOCIAL AND CULTURAL PROFESSIONALS</b>                    |              |
| 261       | <b>LEGAL PROFESSIONALS</b>   |              |
| 2611      | <u>Lawyers</u>   |              |
| 26111     | Advocate/Solicitor   | 25011        |
| 26112     | Lawyer (excluding advocate and solicitor)                          | 25012        |
| 26113     | Legal officer  | 25013        |
| 2612      | <u>Judges</u>  |              |
| 26120     | Judge  | 25020        |
| 262       | <b>LIBRARIANS, ARCHIVISTS AND CURATORS</b>                         |              |
| 2621      | <u>Archivists, Curators and Conservators</u>                       |              |
| 26211     | Archivist  | 29111        |
| 26212     | Curator (art gallery and museum)                                   | 29112        |
| 26213     | Conservator (art works)  | 29113        |
| 2622      | <u>Librarians and Related Information Professionals</u>            |              |
| 26221     | Librarian  | 29121        |
| 26229     | Other information professionals                                    | 29129        |

| SSOC 2010 | OCCUPATION   | SSOC 2005       |
|-----------|--|-----------------|
| 263       | SOCIAL SCIENCE PROFESSIONALS   |                 |
| 2631      | <u>Economists</u>  |                 |
| 26310     | Economist  | 29210           |
| 2632      | <u>Sociologists, Anthropologists and Related Professionals</u>                 |                 |
| 26321     | Sociologist  | 29221           |
| 26322     | Anthropologist   | 29222           |
| 26323     | Social research analyst  | 21222           |
| 2633      | <u>Historians, Political Scientists and Other Social Science Professionals</u> |                 |
| 26331     | Historian  | 29291           |
| 26332     | Political scientist  | 29292           |
| 26339     | Other social science professionals (eg philosopher)                            | 29299           |
| 2634      | <u>Psychologists</u>   |                 |
| 26340     | Psychologist   | 29293           |
| 2635      | <u>Social Work and Counselling Professionals</u>                               |                 |
| 26351     | Social worker (general)  | 29231           |
| 26352     | Social worker (delinquency)  | 29232           |
| 26353     | Medical social worker  | 29233           |
| 26354     | Counsellor (rehabilitation)  | 29234           |
| 26355     | Counsellor (drugs and alcohol)   | 29235           |
| 26356     | Counsellor (family)  | 29236           |
| 26357     | School counsellor  | 39302           |
| 26359     | Other social work and counselling professionals                                | 29239           |
| 264       | AUTHORS, JOURNALISTS AND EDITORS   |                 |
| 2641      | <u>Authors and Related Writers</u>   |                 |
| 26411     | Author   | 29311           |
| 26412     | Script writer  | 29312           |
| 26413     | Advertising copywriter   | 29313           |
| 26414     | Technical writer   | 29314           |
| 26415     | Continuity and script editor   | 29332           |
| 26416     | Book editor  | 29333           |
| 26419     | Other authors and related writers  | 29319,<br>29339 |
| 2642      | <u>Journalists</u>   |                 |
| 26421     | Journalist   | 29300           |
| 26422     | Editor (news and periodicals)  | 29320           |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| 265       | CREATIVE AND PERFORMING ARTISTS                                     |                 |
| 2651      | <u>Visual Artists</u>   |                 |
| 26511     | Sculptor  | 29341           |
| 26512     | Painter   | 29342           |
| 26513     | Cartoonist  | 29343           |
| 26519     | Other visual artists  | 29349           |
| 2652      | <u>Musicians, Composers and Singers</u>                             |                 |
| 26521     | Instrumentalist   | 29350           |
| 26522     | Composer/Orchestrator   | 29371,<br>29372 |
| 26523     | Conductor/Director of orchestra/band/choir                          | 29373           |
| 26524     | Singer  | 29374           |
| 26529     | Other musicians, composers and singers                              | 29379           |
| 2653      | <u>Dancers and Choreographers</u>                                   |                 |
| 26531     | Dancer  | 29382           |
| 26532     | Choreographer   | 29381           |
| 2654      | <u>Film, Stage and Related Directors and Producers</u>              |                 |
| 26541     | Producer (stage, film, television, computer games, video and radio) | 29391           |
| 26542     | Director (stage, film, television and radio)                        | 29392           |
| 26543     | Artistic director (stage, film, television and radio)               | 39539 (part)    |
| 26544     | Producer/Director of commercials                                    | 29393           |
| 26545     | Editor (radio, television and video)                                | 29331           |
| 26549     | Other film, stage and related directors and producers               | 29399           |
| 2655      | <u>Actors</u>   |                 |
| 26550     | Actor   | 29394           |
| <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  | 29401           |
| 29019     | Other religious professionals                                       | 29409           |
| 2909      | <u>Other Professionals Not Elsewhere Classified</u>                 |                 |
| 29090     | Other professionals nec   | 29900           |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| <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  | 31101     |
| 31112     | Physics technician  | 31102     |
| 31119     | Other chemical and physical science technicians                 | 31109     |
| 3112      | <u>Civil Engineering Technicians</u>                            |           |
| 31121     | Civil engineering technician                                    | 31211     |
| 31122     | Structural engineering technician                               | 31212     |
| 31123     | Building technician   | 31213     |
| 31124     | Land surveying technician                                       | 31214     |
| 31125     | Resident technical officer                                      | 31215     |
| 31129     | Other civil engineering and related technicians                 | 31219     |
| 3113      | <u>Electrical Engineering Technicians</u>                       |           |
| 31131     | Electrical engineering technician (general)                     | 31221     |
| 31132     | Electrical engineering technician (high voltage)                | 31222     |
| 31139     | Other electrical engineering technicians                        | 31229     |
| 3114      | <u>Electronics Engineering Technicians</u>                      |           |
| 31141     | Electronics engineering technician (general)                    | 31231     |
| 31142     | Semi-conductor technician                                       | 31234     |
| 31143     | Audio and video equipment technician                            | 31235     |
| 31144     | Instrumentation technician                                      | 31236     |
| 31149     | Other electronics engineering technicians                       | 31239     |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| 3115      | <u>Mechanical Engineering Technicians</u>                                   |           |
| 31151     | Mechanical engineering technician (general)                                 | 31241     |
| 31152     | Aeronautical engineering technician   | 31242     |
| 31153     | Automotive engineering technician   | 31243     |
| 31154     | Air-conditioning/Refrigeration engineering technician                       | 31244     |
| 31155     | Machining/Tooling technician  | 31245     |
| 31156     | Tool/Mould designer   | 31246     |
| 31157     | Marine surveyor (ship and nautical)   | 31593     |
| 31158     | Airworthiness surveyor  | 31597     |
| 31159     | Other mechanical engineering technicians                                    | 31249     |
| 3116      | <u>Chemical Engineering Technicians</u>                                     |           |
| 31161     | Chemical engineering technician (general)                                   | 31251     |
| 31162     | Chemical engineering technician (petroleum and natural gas)                 | 31252     |
| 31163     | Chemical engineering technician (petrochemicals)                            | 31253     |
| 31169     | Other chemical engineering technicians                                      | 31259     |
| 3117      | <u>Manufacturing Engineering Technicians</u>                                |           |
| 31171     | Manufacturing engineering technician (general)                              | 31261     |
| 31172     | Production engineering technician   | 31262     |
| 31173     | Automation designer   | 31263     |
| 31174     | Automation technician   | 31264     |
| 31175     | Quality assurance technician  | 31265     |
| 31179     | Other manufacturing engineering technicians                                 | 31269     |
| 3118      | <u>Draughtsmen</u>  |           |
| 31181     | Draughtsman (general)   | 31271     |
| 31182     | Mechanical draughtsman  | 31272     |
| 31183     | Electrical/Electronics draughtsman  | 31273     |
| 31184     | Civil/Structural engineering draughtsman                                    | 31274     |
| 31185     | Architectural draughtsman   | 31275     |
| 31186     | Marine draughtsman  | 31276     |
| 31189     | Other draughtsmen (eg cartographical draughtsman)                           | 31279     |
| 3119      | <u>Physical and Engineering Science Technicians Not Elsewhere Classific</u> |           |
| 31191     | Mechatronics technician   | 31291     |
| 31192     | Refining/Smelting technician  | 31292     |
| 31193     | Physical metallurgy technician  | 31293     |
| 31194     | Petroleum and natural gas extraction technician                             | 31294     |
| 31195     | Electronic pre-press technician   | 31295     |
| 31196     | Precision optics technician   | 31297     |
| 31197     | Quantity surveying technician   | 31298     |
| 31199     | Other physical and engineering science technicians nec                      | 31299     |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| 314       | LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS  |                 |
| 3141      | <u>Life Science Technicians (Except Medical)</u>              |                 |
| 31411     | Biological technician   | 32112           |
| 31412     | Food science technician                                       | new item        |
| 31419     | Other life science technicians                                | 32119           |
| 3142      | <u>Agronomy, Horticultural and Farming Technicians</u>        |                 |
| 31421     | Horticultural technician                                      | 32121           |
| 31422     | Plant tissue culture technician                               | 32122           |
| 31423     | Farming technician (animal production)                        | 32131           |
| 31429     | Other agronomy, horticultural and farming related technicians | 32129,<br>32139 |
| 315       | SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS                 |                 |
| 3151      | <u>Ships' Engineers</u>                                       |                 |
| 31511     | Chief engineer officer (ship)                                 | 31511           |
| 31512     | Marine engineer officer                                       | 31512           |
| 31513     | Marine superintendent engineer                                | 31513           |
| 3152      | <u>Ships' Deck Officers and Pilots</u>                        |                 |
| 31521     | Ship captain  | 31521           |
| 31522     | Ship's navigating officer                                     | 31522           |
| 31523     | Ship pilot  | 31523           |
| 31524     | Marine superintendent (deck)                                  | 31524           |
| 31529     | Other ships' deck officers and pilots                         | 31529           |
| 3153      | <u>Aircraft Pilots and Related Associate Professionals</u>    |                 |
| 31531     | Commercial airline pilot                                      | 31531           |
| 31532     | Aircraft pilot (except commercial airline and air force)      | 31532           |
| 31533     | Flight navigator  | 31533           |
| 31534     | Flight engineer   | 31534           |
| 31535     | Flying instructor (except air force)                          | 31535           |
| 31539     | Other aircraft pilots and related associate professionals     | 31539           |
| 3154      | <u>Air Traffic Controllers</u>                                |                 |
| 31540     | Air traffic controller  | 31540           |
| 3156      | <u>Sea Traffic Controllers</u>                                |                 |
| 31560     | Sea traffic controller  | 31550           |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 3157      | <u>Transport Operations Supervisors</u>  |              |
| 31571     | Air transport service supervisor   | 31561        |
| 31572     | MRT service supervisor   | 31562        |
| 31573     | Road transport supervisor  | 31563        |
| 31574     | Port/Shipping operations supervisor  | 31564        |
| 31579     | Other transport operations supervisors   | 31569        |
| 3159      | <u>Transport Controllers and Related Workers Not Elsewhere Classified</u>                    |              |
| 31591     | Port master/Dockmaster   | 31591        |
| 31592     | Port captain   | 31592        |
| 31593     | Ship charterer   | 31599 (part) |
| 31594     | Flight operations officer  | 31594        |
| 31595     | Air cargo officer  | 31595        |
| 31596     | Load-sheet officer (aircraft)  | 31596        |
| 31597     | MRT operations officer   | 31598        |
| 31599     | Other transport controllers and related workers nec  | 31599 (part) |
| 316       | PREMISES AND PARKS OFFICERS  |              |
| 3160      | <u>Premises and Parks Officers</u>   |              |
| 31601     | Premises and facilities maintenance officer  | 31612        |
| 31602     | Landscape operations officer   | new item     |
| 31603     | Parks officer  | new item     |
| 317       | BUILDING, QUALITY AND SAFETY INSPECTORS  |              |
| 3171      | <u>Building and Fire Inspectors</u>  |              |
| 31711     | Fire and safety inspector  | 31611        |
| 31719     | Other building and fire inspectors   | 31619        |
| 3172      | <u>Quality and Safety Inspectors</u>   |              |
| 31720     | Safety inspector (vehicles, processes and products)  | 31622 (part) |
| <b>32</b> | <b>HEALTH ASSOCIATE PROFESSIONALS</b>  |              |
| 321       | MEDICAL AND PHARMACEUTICAL TECHNICIANS   |              |
| 3211      | <u>Medical Imaging and Therapeutic Equipment Technicians</u>                                 |              |
| 32111     | Medical diagnostic radiographer  | 32301        |
| 32112     | Radiation therapist  | 32302        |
| 32113     | Sonographer  | 32303        |
| 32114     | Medical X-ray technician   | 32304        |
| 32119     | Other medical imaging, therapeutic equipment technicians and related associate professionals | 32309        |

Major Group 3: Associate Professionals and Technicians

| SSOC 2010                       | OCCUPATION   | SSOC 2005                           |
|---------------------------------|--|-------------------------------------|
| 3212<br>32120                   | <u>Medical and Pathology Laboratory Technicians</u><br>Medical and pathology laboratory technician   | 32111                               |
| 3213<br>32130                   | <u>Pharmaceutical Technicians</u><br>Pharmaceutical technician   | 32290                               |
| 3214<br>32141<br>32142<br>32143 | <u>Medical and Dental Prosthetic Technicians</u><br>Orthopaedic technician<br>Orthopaedic appliance maker and repairer<br>Dental technician                              | 32311<br>32312<br>32313             |
| 322                             | NURSING ASSOCIATE PROFESSIONALS  |                                     |
| 3220<br>32201                   | <u>Nursing Associate Professionals</u><br>Registered nurse   | 32261,<br>32262,<br>32263,<br>32264 |
| 32202                           | Enrolled/Assistant nurse   | 32269                               |
| 323                             | TRADITIONAL AND COMPLEMENTARY MEDICINE ASSOCIATE PROFESSIONALS   |                                     |
| 3230<br>32300                   | <u>Traditional and Complementary Medicine Associate Professionals</u><br>Traditional and complementary medicine associate professionals<br>(eg homeopath and naturopath) | 32319 (part)                        |
| 324                             | VETERINARY TECHNICIANS AND ASSISTANTS  |                                     |
| 3240<br>32400                   | <u>Veterinary Technicians and Assistants</u><br>Veterinary technician/assistant  | 32280                               |
| 325                             | OTHER HEALTH ASSOCIATE PROFESSIONALS   |                                     |
| 3251<br>32511<br>32512          | <u>Dental Nurses and Therapists</u><br>Dental nurse<br>Dental/Oral health therapist  | 32270<br>32249 (part)               |
| 3252<br>32521<br>32522          | <u>Dietitians and Nutritionists</u><br>Dietitian<br>Nutritionist   | 32251<br>32252                      |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 3253      | <u>Audiologists and Speech Therapists</u>   |              |
| 32531     | Audiologist   | 32249 (part) |
| 32532     | Speech therapist  | 32241        |
| 3254      | <u>Optometrists and Opticians</u>   |              |
| 32541     | Optometrist   | 32211        |
| 32542     | Optician  | 32212        |
| 3255      | <u>Physiotherapists and Related Associate Professionals</u>                               |              |
| 32551     | Physiotherapist   | 32220        |
| 32552     | Massage therapist   | 32242        |
| 32559     | Other physical therapists and related associate professionals                             | 32249 (part) |
| 3256      | <u>Occupational Therapists</u>  |              |
| 32560     | Occupational therapist  | 32230        |
| 3257      | <u>Environmental and Occupational Health Inspectors</u>                                   |              |
| 32571     | Environmental inspector (environmental public health)                                     | 31621 (part) |
| 32572     | Occupational health inspector   | 31622 (part) |
| 3259      | <u>Health Associate Professionals Not Elsewhere Classified</u>                            |              |
| 32591     | Osteopath   | 32243        |
| 32592     | Chiropractor  | 32244        |
| 32593     | Podiatrist  | 32319 (part) |
| 32594     | Paramedic   | 32319 (part) |
| 32595     | Community health worker   | 32319 (part) |
| 32599     | Other health associate professionals nec  | 32319 (part) |
| <b>33</b> | <b>BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS</b>                                |              |
| 331       | FINANCIAL AND MATHEMATICAL ASSOCIATE PROFESSIONALS  |              |
| 3311      | <u>Securities and Finance Dealers and Brokers</u>   |              |
| 33111     | Securities and finance dealer/broker  | 34120        |
| 33112     | Foreign exchange dealer/broker  | 34130        |
| 33113     | Financial derivatives dealer/broker   | 34140        |
| 33114     | Commodities derivatives broker  | 34150        |
| 33119     | Other finance dealers and brokers   | 34160        |
| 3312      | <u>Credit and Loans Officers</u>  |              |
| 33120     | Credit and loans officer  | 39229 (part) |
| 3313      | <u>Accounting Associate Professionals</u>   |              |
| 33130     | Accounting associate professional (eg assistant accountant, audit (accounting) executive) | 34110        |

| SSOC 2010 | OCCUPATION   | SSOC 2005       |
|-----------|--|-----------------|
| 3314      | <u>Statistical, Mathematical and Actuarial Associate Professionals</u>         |                 |
| 33141     | Statistical officer  | 39211           |
| 33142     | Research officer (statistical)   | 39212 (part)    |
| 33149     | Other statistical, mathematical and actuarial associate professionals          | 39219           |
| 3315      | <u>Valuers and Loss Assessors</u>  |                 |
| 33151     | Appraiser/Valuer   | 34231 (part)    |
| 33152     | Assessor   | 34231 (part)    |
| 332       | SALES AND RELATED ASSOCIATE PROFESSIONALS                                      |                 |
| 3321      | <u>Insurance Representatives</u>   |                 |
| 33211     | Insurance sales agent/broker (including independent financial planner)         | 34170           |
| 33212     | Insurance underwriter  | 34180           |
| 33219     | Other insurance representatives  | 34190           |
| 3322      | <u>Commercial and Marketing Sales Representatives</u>                          |                 |
| 33221     | Business development executive   | 39229 (part)    |
| 33222     | Marketing and sales representative (technical)                                 | 34211           |
| 33223     | Marketing and sales representative (medical and pharmaceutical products)       | 34212           |
| 33224     | Marketing and sales representative (ICT)                                       | 34219 (part)    |
| 33225     | Marketing and sales representative (institutional sales of financial products) | 34219 (part)    |
| 33226     | After sales adviser/Client account service executive                           | 24902,<br>34213 |
| 33229     | Other commercial and marketing sales representatives                           | 34219 (part)    |
| 3323      | <u>Buyers and Purchasing Agents</u>  |                 |
| 33231     | Buyer  | 34221           |
| 33232     | Purchasing agent   | 34222           |
| 3324      | <u>Trade and Ship Brokers</u>  |                 |
| 33241     | Trade broker (including oil and bunker trader)                                 | 34302           |
| 33242     | Ship broker  | 34309 (part)    |
| 3329      | <u>Sales and Related Associate Professionals Not Elsewhere Classified</u>      |                 |
| 33290     | Sales and related associate professional nec                                   | 34249           |
| 333       | BUSINESS SERVICES AGENTS   |                 |
| 3331      | <u>Shipping, Clearing and Forwarding Agents</u>                                |                 |
| 33311     | Clearing and forwarding agent  | 34303           |
| 33312     | Ship agent   | 34309 (part)    |

| SSOC 2010                                | OCCUPATION   | SSOC 2005   |
|--|--|---|
| 3332<br>33320                            | <u>Conference and Event Planners</u><br>Exhibition/Conference/Event planner  | 34241   |
| 3333<br>33330                            | <u>Employment Agents and Labour Contractors</u><br>Employment agent/Labour contractor  | 34304   |
| 3334<br>33340                            | <u>Real Estate Agents</u><br>Real estate agent   | 34200   |
| 3339<br>33391<br>33392<br>33399          | <u>Business Services Agents Not Elsewhere Classified</u><br>Auctioneer<br>Advertising salesman<br>Other business services agents nec (eg sports agent, artiste agent)  | 34232<br>34301<br>34309 (part)                        |
| 334                                      | ADMINISTRATIVE ASSOCIATE PROFESSIONALS   |   |
| 3345<br>33450                            | <u>Public Relations Associate Professionals</u><br>Public relations/Corporate communications officer   | 39225   |
| 3346<br>33461<br>33462<br>33463<br>33464 | <u>Human Resource Associate Professionals</u><br>Personnel/Human resource officer<br>Industrial relations officer<br>Training officer<br>Crewing executive (ship)  | 39222<br>39224<br>39223<br>new item                   |
| 3349<br>33491<br>33492<br>33493<br>33499 | <u>Administrative and Related Associate Professionals Not Elsewhere Classified</u><br>Management executive<br>Research officer (non-statistical)<br>Operations officer (except transport operations)<br>Other administrative and related associate professionals nec | 39221<br>39212 (part)<br>39229 (part)<br>39229 (part) |
| 335                                      | GOVERNMENT ASSOCIATE PROFESSIONALS   |   |
| 3351<br>33510                            | <u>Customs and Immigration Officers</u><br>Customs/Immigration officer   | 39112,<br>39119 (part)                                |
| 3355<br>33550                            | <u>Police Inspectors</u><br>Police inspector   | 39111<br>39119 (part)                                 |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 3359      | <u>Government Associate Professionals Not Elsewhere Classified</u>   |              |
| 33591     | Government tax and excise official   | 39190 (part) |
| 33592     | Government social benefits official  | 39190 (part) |
| 33593     | Government licensing official  | 39190 (part) |
| 33599     | Other government associate professionals nec   | 39190 (part) |
| <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)  | 39229 (part) |
| 3412      | <u>Social Work Associate Professionals</u>   |              |
| 34121     | Youth worker   | 39301        |
| 34129     | Other social work associate professionals  | 39309        |
| 342       | SPORTS AND FITNESS WORKERS   |              |
| 3421      | <u>Athletes and Sportsmen</u>  |              |
| 34210     | Professional sportsman   | 39550        |
| 3422      | <u>Sports Coaches, Instructors, Officials and Other Related Associate Professionals</u>                              |              |
| 34221     | Sports coach   | 39560        |
| 34222     | Martial arts instructor  | 39582        |
| 34223     | Physical fitness instructor (including yoga instructor and aerobics instructor)                                      | 39570        |
| 34224     | Sports official  | 39581        |
| 34229     | Other related instructors and associate professionals (eg adventure training instructor and scuba diving instructor) | 39589        |
| 343       | ARTISTIC AND CULTURAL ASSOCIATE PROFESSIONALS  |              |
| 3431      | <u>Photographers</u>   |              |
| 34310     | Photographer   | 31411        |
| 3432      | <u>Interior Designers and Decorators</u>   |              |
| 34321     | Interior designer  | 39510        |
| 34322     | Landscape designer   | new item     |
| 34323     | Display artist   | 39533        |
| 34324     | Decorator and related worker (eg window dresser and set designer)  | 39539 (part) |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 3433      | <u>Gallery, Museum and Library Technicians</u>                                |              |
| 34331     | Library officer   | 39226        |
| 34332     | Gallery, museum and related technician  | 32113        |
| 3435      | <u>Fashion, Garment and Product Designers</u>                                 |              |
| 34351     | Fashion/Garment designer  | 39520        |
| 34352     | Product designer  | 39532        |
| 3436      | <u>Graphic and Multimedia Designers and Artists</u>                           |              |
| 34361     | Graphic designer  | 39534        |
| 34362     | Multimedia (including computer games) designer                                | 39535 (part) |
| 34363     | Multimedia artist   | 39535 (part) |
| 34364     | Animator  | 39535 (part) |
| 34369     | Other graphic and multimedia designers and artists                            | 39539 (part) |
| 3439      | <u>Artistic and Cultural Associate Professionals Not Elsewhere Classified</u> |              |
| 34391     | Commercial artist   | 39531        |
| 34392     | Tattooist   | 39539 (part) |
| 34399     | Other artistic and cultural associate professionals nec                       | 39539 (part) |
| 344       | PERFORMING ASSOCIATE PROFESSIONALS  |              |
| 3441      | <u>Radio and Television Presenters and Related Associate Professionals</u>    |              |
| 34411     | Radio presenter   | 39501        |
| 34412     | Television presenter  | 39502        |
| 34413     | Dubbing artiste   | 39503        |
| 34414     | Disc jockey   | 39504        |
| 34419     | Other radio and television presenters and related associate professionals     | 39509        |
| 3442      | <u>Clowns, Magicians, Acrobats and Related Associate Professionals</u>        |              |
| 34421     | Clown   | 39541        |
| 34422     | Magician  | 39542        |
| 34423     | Acrobat   | 39543        |
| 34424     | Aerialist   | 39544        |
| 34429     | Other clowns, magicians and related associate professionals                   | 39549        |
| <b>35</b> | <b>INFORMATION AND COMMUNICATIONS TECHNICIANS</b>                             |              |
| 351       | INFORMATION AND COMMUNICATIONS TECHNOLOGY OPERATORS AND TECHNICIANS           |              |
| 3511      | <u>Computer Systems Operators</u>   |              |
| 35110     | Computer systems operator   | 31300        |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 3512      | <u>Computer Technicians</u>   |              |
| 35120     | Computer technician (including IT user helpdesk technician)                           | 31233        |
| 3514      | <u>Website Administrators</u>   |              |
| 35140     | Website administrator/Webmaster   | new item     |
| 352       | <b>TELECOMMUNICATIONS AND BROADCASTING TECHNICIANS<br/>AND AUDIO-VISUAL OPERATORS</b> |              |
| 3521      | <u>Broadcasting Technicians and Audio-Visual Operators</u>                            |              |
| 35211     | Broadcasting operations technician  | 31296        |
| 35212     | Video camera operator   | 31412        |
| 35213     | Television/Motion picture camera operator   | 31413        |
| 35214     | Radio and television studio equipment operator  | 31414        |
| 35215     | Sound recording equipment operator  | 31415        |
| 35219     | Other broadcasting technicians and audio-visual operators                             | 31419        |
| 3522      | <u>Telecommunications Engineering Technicians</u>                                     |              |
| 35220     | Telecommunications technician   | 31232        |
| 3523      | <u>Telecommunications Equipment Operators</u>   |              |
| 35231     | Telecommunications service supervisor   | 31421        |
| 35232     | Radio-telephone operator (land-based)   | 31422        |
| 35233     | Ship's radio officer  | 31423        |
| 35234     | Flight radio operator   | 31424        |
| 35239     | Other telecommunications equipment operators  | 31429        |
| 3529      | <u>Optical and Electronic Equipment Operators Not Elsewhere Classified</u>            |              |
| 35290     | Optical and electronic equipment operator nec   | 31490        |
| <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   | 33110 (part) |

| SSOC 2010 | OCCUPATION   | SSOC 2005       |
|-----------|--|-----------------|
| 362       | EXTRACURRICULUM INSTRUCTORS                                      |                 |
| 3620      | <u>Extracurriculum Instructors</u>                               |                 |
| 36201     | Language instructor (extracurriculum)                            | 33201           |
| 36202     | Art and craft instructor (extracurriculum)                       | 29344,<br>33202 |
| 36203     | Information technology trainer (extracurriculum)                 | 33203           |
| 36204     | Music instructor (extracurriculum)                               | 29360           |
| 36205     | Dance instructor (extracurriculum)                               | 29383           |
| 36206     | Speech and drama instructor (extracurriculum)                    | 33209 (part)    |
| 36209     | Other extracurriculum instructors                                | 33209 (part)    |
| 369       | TEACHING ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED        |                 |
| 3691      | <u>Private Tutors</u>  |                 |
| 36910     | Private tutor (academic)   | 33910           |
| 3699      | <u>Teaching Associate Professionals Not Elsewhere Classified</u> |                 |
| 36991     | Relief teacher   | 33991           |
| 36999     | Other teaching associate professionals nec                       | 33999           |
| <b>39</b> | <b>OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>    |                 |
| 391       | TRANSLATORS AND INTERPRETERS                                     |                 |
| 3910      | <u>Translators and Interpreters</u>                              |                 |
| 39101     | Translator   | 39400           |
| 39102     | Interpreter  | 39410           |
| 399       | OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED           |                 |
| 3991      | <u>Religious Associate Professionals</u>                         |                 |
| 39910     | Non-ordained religious associate professional                    | 39600           |
| 3999      | <u>Other Associate Professionals Not Elsewhere Classified</u>    |                 |
| 39990     | Other associate professionals nec                                | 39900           |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| <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                                     | new item  |
| <b>41</b> | <b>GENERAL AND KEYBOARD CLERKS</b>                      |           |
| 411       | GENERAL OFFICE CLERKS                                   |           |
| 4110      | <u>General Office Clerks</u>                            |           |
| 41101     | Office clerk (general)                                  | 41201     |
| 41102     | Filing and copying clerk                                | 41205     |
| 41103     | Personnel/Human resource clerk                          | 41206     |
| 41109     | Other administrative clerks (eg public relations clerk) | 41209     |
| 412       | SECRETARIES AND VERBATIM REPORTERS                      |           |
| 4120      | <u>Secretaries and Verbatim Reporters</u>               |           |
| 41201     | Secretary   | 41111     |
| 41202     | Verbatim reporter                                       | 41112     |
| 413       | KEYBOARD OPERATORS                                      |           |
| 4131      | <u>Typists and Word Processing Operators</u>            |           |
| 41311     | Stenographer  | 41121     |
| 41312     | Typist  | 41122     |
| 41319     | Other word processors and related operators             | 41129     |
| 4132      | <u>Data Entry Clerks</u>                                |           |
| 41320     | Data entry clerk  | 41130     |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| <b>42</b> | <b>CUSTOMER SERVICES CLERKS</b>                           |                 |
| 421       | TELLERS, MONEY COLLECTORS AND RELATED CLERKS              |                 |
| 4211      | <u>Bank Tellers and Other Counter Clerks</u>              |                 |
| 42111     | Bank teller   | 42121           |
| 42112     | Postal service counter clerk                              | 42122           |
| 42113     | Money changer   | 42123           |
| 42119     | Other tellers and counter clerks                          | 42129           |
| 4213      | <u>Pawnbrokers and Moneylenders</u>                       |                 |
| 42131     | Pawnbroker  | 42131           |
| 42132     | Moneylender   | 42132           |
| 4214      | <u>Bill Collectors and Related Workers</u>                |                 |
| 42141     | Bill collector  | 42191           |
| 42149     | Other bill collectors and related workers                 | 42199 (part)    |
| 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  | 42231,<br>42239 |
| 4224      | <u>Receptionists and Information Clerks</u>               |                 |
| 42241     | Receptionist (general)                                    | 42221           |
| 42242     | Hotel receptionist  | 42222           |
| 42243     | Medical/Dental receptionist                               | 42223           |
| 42244     | Airport receptionist/clerk                                | 42224           |
| 42245     | Customer service clerk                                    | 42225           |
| 42246     | Contact centre information clerk                          | 42229 (part)    |
| 42249     | Other receptionists and information clerks                | 42229 (part)    |
| 4229      | <u>Client Information Clerks Not Elsewhere Classified</u> |                 |
| 42290     | Client information clerk nec                              | 42290           |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| <b>43</b> | <b>NUMERICAL AND MATERIAL-RECORDING CLERKS</b>       |              |
| 431       | NUMERICAL CLERKS                                     |              |
| 4311      | <u>Accounting and Bookkeeping Clerks</u>             |              |
| 43111     | Bookkeeper   | 41301        |
| 43112     | Ledger and accounts clerk                            | 41302        |
| 43113     | Audit clerk  | 41303        |
| 43114     | Payroll/Wages clerk                                  | 41304        |
| 43115     | Billing clerk  | 41305        |
| 43116     | Purchasing clerk                                     | 41309 (part) |
| 43119     | Other accounting clerks (eg cost clerk)              | 41309 (part) |
| 4312      | <u>Finance and Insurance Clerks</u>                  |              |
| 43121     | Bank operations clerk                                | 41309 (part) |
| 43122     | Insurance/Underwriting clerk                         | 41203        |
| 43123     | Securities clerk                                     | 41306        |
| 43129     | Other finance and insurance clerks (eg credit clerk) | 41309 (part) |
| 4314      | <u>Statistical Clerks</u>                            |              |
| 43141     | Statistical clerk (general)                          | 41411        |
| 43142     | Enumerator/Market research interviewer               | 41412        |
| 43149     | Other statistical clerks                             | 41419        |
| 4315      | <u>Computer Operations Clerks</u>                    |              |
| 43151     | Data processing control clerk                        | 41421        |
| 43159     | Other computer operations clerks                     | 41429        |
| 432       | MATERIAL-RECORDING AND TRANSPORT CLERKS              |              |
| 4321      | <u>Stock Clerks</u>                                  |              |
| 43211     | Stock records clerk                                  | 41512        |
| 43212     | Storekeeper  | 41513        |
| 43219     | Other stock clerks                                   | 41519 (part) |
| 4322      | <u>Production Clerks</u>                             |              |
| 43221     | Material planning clerk                              | 41521        |
| 43222     | Production planning clerk                            | 41522        |
| 43229     | Other production clerks                              | 41529        |
| 4323      | <u>Transport Clerks</u>                              |              |
| 43231     | Shipping clerk                                       | 41511        |
| 43239     | Other transport clerks (eg land and air transport)   | 41519 (part) |

Major Group 4: Clerical Support Workers

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| SSOC 2010 | OCCUPATION   | SSOC 2005 |
|-----------|--|-----------|
| <b>44</b> | <b>OTHER CLERICAL SUPPORT WORKERS</b>                    |           |
| 441       | OTHER CLERICAL SUPPORT WORKERS                           |           |
| 4411      | <u>Library Clerks</u>                                    |           |
| 44110     | Library clerk  | 41204     |
| 4417      | <u>Legal Clerks</u>                                      |           |
| 44170     | Legal clerk  | 41202     |
| 4419      | <u>Clerical Support Workers Not Elsewhere Classified</u> |           |
| 44191     | Proofreading clerk                                       | 49001     |
| 44199     | Other clerical support workers nec                       | 49009     |

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| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| <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)  | 51112        |
| 51112     | Cabin attendant/steward   | 51113        |
| 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 (eg bus conductor) | 51129        |
| 5113      | <u>Tour and Other Guides</u>  |              |
| 51131     | Tour guide  | 51130        |
| 51132     | Nature guide (including zoo, birdpark and aquarium)                       | 51190 (part) |
| 51133     | Theme park guide  | 51190 (part) |
| 51139     | Other guides (eg museum, historical sites)                                | 51190 (part) |
| 512       | CHEFS AND COOKS   |              |
| 5120      | <u>Chefs and Cooks</u>  |              |
| 51201     | Chef  | 51220 (part) |
| 51202     | Cook  | 51220 (part) |
| 513       | WAITERS AND BARTENDERS  |              |
| 5131      | <u>Waiters</u>  |              |
| 51311     | Captain waiter/Waiter supervisor  | 51230 (part) |
| 51312     | Waiter  | 51230 (part) |
| 5132      | <u>Bartenders</u>   |              |
| 51320     | Bartender   | 51240        |
| 5133      | <u>Bar/Lounge Hostesses</u>   |              |
| 51330     | Bar/Lounge hostess  | 51250        |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 5139      | <u>Waiters and Bartenders Not Elsewhere Classified</u>         |              |
| 51390     | Waiter and bartender nec (eg food checker (catering services)) | 51290        |
| 514       | HAIRDRESSERS, BEAUTICIANS AND RELATED WORKERS                  |              |
| 5141      | <u>Hairdressers, Barbers and Other Related Workers</u>         |              |
| 51411     | Hair stylist/Hairdresser                                       | 51310        |
| 51412     | Barber   | 51320        |
| 51419     | Other hair care workers (eg hair therapist/consultant)         | 51349 (part) |
| 5142      | <u>Beauticians and Related Workers</u>                         |              |
| 51421     | Beautician   | 51330 (part) |
| 51422     | Manicurist   | 51341        |
| 51423     | Make-up artist (stage, film and studio)                        | 51342        |
| 5149      | <u>Wellness Related Workers Not Elsewhere Classified</u>       |              |
| 51491     | Masseur (non-medical) (including foot reflexologist)           | 51391        |
| 51492     | Slimming consultant  | 51330 (part) |
| 51499     | Other wellness related workers nec                             | 51349 (part) |
| 515       | HOUSEKEEPERS AND RELATED WORKERS                               |              |
| 5150      | <u>Housekeepers and Related Workers</u>                        |              |
| 51501     | Housekeeper (hotels and other establishments)                  | 51211        |
| 51502     | House steward  | 51212        |
| 51503     | Housekeeping matron  | 51213        |
| 51509     | Other housekeepers and related workers (eg personal butler)    | 51219        |
| 516       | MAIL CARRIERS AND SORTING WORKERS                              |              |
| 5160      | <u>Mail Carriers and Sorting Workers</u>                       |              |
| 51601     | Postal/Courier service supervisor                              | 51501        |
| 51602     | Postman  | 51502        |
| 51603     | Process server   | 51503        |
| 51604     | Despatch worker  | 51509 (part) |
| 51609     | Other mail distribution workers (eg mail sorter)               | 51509 (part) |
| 517       | BOOKMAKERS, CROUPIERS AND RELATED GAMING WORKERS               |              |
| 5170      | <u>Bookmakers, Croupiers and Related Gaming Workers</u>        |              |
| 51701     | Gaming supervisor  | new item     |
| 51702     | Bookmaker/Croupier/Casino dealer and related gaming worker     | new item     |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 519       | PERSONAL SERVICE WORKERS NOT ELSEWHERE CLASSIFIED               |              |
| 5191      | <u>Astrologers, Fortune-tellers and Related Workers</u>         |              |
| 51910     | Astrologer/Fortune teller and related worker                    | 51399 (part) |
| 5193      | <u>Undertakers and Embalmers</u>                                |              |
| 51931     | Undertaker  | 51351        |
| 51932     | Embalmer  | 51352        |
| 5194      | <u>Pet Groomers, Animal Keepers and Trainers</u>                |              |
| 51941     | Pet groomer   | 39599 (part) |
| 51942     | Keeper/Trainer in zoological, bird and aquatic parks            | 39591        |
| 51943     | Keeper/Trainer in crocodile farm                                | 39592        |
| 51944     | Horse trainer   | 39593        |
| 51945     | Dog trainer   | 39594        |
| 51949     | Other animal/bird keepers and animal care workers               | 39599 (part) |
| 5195      | <u>Driving Instructors</u>                                      |              |
| 51950     | Driving instructor/tester                                       | 83230        |
| 5199      | <u>Personal Service Workers Not Elsewhere Classified</u>        |              |
| 51991     | Social escort   | 51392        |
| 51999     | Other personal service workers nec                              | 51399 (part) |
| <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)         | 52220        |
| 5212      | <u>Hawker/Stall Holders (Prepared Food Or Drinks)</u>           |              |
| 52120     | Hawker/Stall holder (prepared food or drinks)                   | 52210        |
| 5213      | <u>Newsvendors</u>  |              |
| 52130     | Newsvendor  | 52230        |
| 5219      | <u>Other Stall Sales Workers</u>                                |              |
| 52190     | Other stall sales workers                                       | 52290        |

| SSOC 2010  | OCCUPATION   | SSOC 2005              |
|------------|--|------------------------|
| <b>522</b> | <b>SHOP SALESPERSONS</b>                                   |                        |
| 5220       | <u>Shop and Store Salespersons</u>                         |                        |
| 52201      | Sales supervisor   | 52101                  |
| 52202      | Shop sales assistant                                       | 52102                  |
| <b>523</b> | <b>CASHIERS AND TICKET CLERKS</b>                          |                        |
| 5230       | <u>Cashiers and Ticket Clerks</u>                          |                        |
| 52301      | Cage/Count supervisor                                      | new item               |
| 52302      | Cashier (general)  | 42111                  |
| 52303      | Office cashier   | 42112                  |
| 52309      | Other cashiers, ticket and related clerks                  | 42119,<br>42199 (part) |
| <b>524</b> | <b>MODELS, SALES DEMONSTRATORS AND OTHER SALES WORKERS</b> |                        |
| 5241       | <u>Fashion and Other Models</u>                            |                        |
| 52411      | Fashion model  | 52301                  |
| 52419      | Other models (eg artist's model)                           | 52309                  |
| 5242       | <u>Sales Demonstrators and Door-to-Door Salespersons</u>   |                        |
| 52421      | Sales demonstrator   | 52103                  |
| 52422      | Salesperson (door-to-door)                                 | 52104                  |
| 5244       | <u>Contact Centre Salespersons</u>                         |                        |
| 52440      | Telemarketer   | 52105                  |
| 5249       | <u>Sales Workers Not Elsewhere Classified</u>              |                        |
| 52491      | Petrol station attendant                                   | 52109 (part)           |
| 52492      | Food service counter attendant                             | 52109 (part)           |
| 52499      | Sales worker nec (eg ship chandler)                        | 52109 (part)           |
| <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)                                     | 51360 (part)           |
| 53112      | Confinement nanny  | 51360 (part)           |
| 53113      | Child /After school care centre worker                     | 51360 (part)           |
| 53114      | Child/Youth residential care assistant                     | 51360 (part)           |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 5312      | <u>Teachers' Aides</u>  |              |
| 53120     | Teachers' aide  | new item     |
| 532       | HEALTHCARE ASSISTANTS AND OTHER PERSONAL CARE WORKERS                   |              |
| 5320      | <u>Healthcare Assistants and Other Personal Care Workers</u>            |              |
| 53201     | Healthcare assistant  | new item     |
| 53209     | Other personal care worker (eg old folks home)                          | 51399 (part) |
| <b>54</b> | <b>PROTECTIVE SERVICES WORKERS</b>                                      |              |
| 541       | PROTECTIVE SERVICES WORKERS   |              |
| 5411      | <u>Fire-Fighting and Rescue Officers</u>                                |              |
| 54110     | Fire-fighting and rescue officer  | 51410        |
| 5412      | <u>Police Officers</u>  |              |
| 54121     | Police officer  | 51421        |
| 54122     | Narcotics officer   | 51422        |
| 54123     | Auxiliary police officer  | 51423        |
| 5413      | <u>Prison Officers</u>  |              |
| 54130     | Prison officer  | 51430        |
| 5414      | <u>Security Guards</u>  |              |
| 54140     | Private security officer  | 51440        |
| 5415      | <u>Lifeguards</u>   |              |
| 54150     | Lifeguard   | 51450        |
| 5419      | <u>Protective Services and Related Workers Not Elsewhere Classified</u> |              |
| 54191     | Private investigator  | 51491        |
| 54192     | Industrial investigator   | 51492        |
| 54193     | Insurance investigator  | 51493        |
| 54194     | Park ranger   | 51494        |
| 54199     | Other protective services and related workers nec                       | 51499        |

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| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| <b>59</b> | <b>SERVICE WORKERS NOT ELSEWHERE CLASSIFIED</b>    |              |
| 590       | SERVICE WORKERS NOT ELSEWHERE CLASSIFIED           |              |
| 5900      | <u>Service Workers Not Elsewhere Classified</u>    |              |
| 59001     | Cinema projectionist                               | 51902        |
| 59009     | Other service workers nec (eg microphone operator) | 51909 (part) |

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| SSOC 2010 | OCCUPATION   | SSOC 2005 |
|-----------|--|-----------|
| <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  | 61011     |
| 61112     | Mushroom farm worker   | 61012     |
| 61119     | Other vegetable farm workers                                   | 61019     |
| 6113      | <u>Gardeners, Horticultural and Nursery Farm Workers</u>       |           |
| 61131     | Flower/Orchid farm worker                                      | 61021     |
| 61132     | Nursery worker   | 61022     |
| 61139     | Other horticultural and nursery farm workers                   | 61029     |
| 612       | ANIMAL PRODUCERS   |           |
| 6121      | <u>Livestock and Dairy Farm Workers</u>                        |           |
| 61210     | Livestock/Dairy farm worker                                    | 61030     |
| 6122      | <u>Poultry Farm Workers</u>                                    |           |
| 61221     | Poultry farm worker (general)                                  | 61041     |
| 61222     | Poultry hatchery worker  | 61042     |
| 61223     | Poultry inseminator  | 61043     |
| 61229     | Other poultry farm workers (eg poultry vaccinator)             | 61049     |
| 619       | AGRICULTURAL WORKERS NOT ELSEWHERE CLASSIFIED                  |           |
| 6190      | <u>Agricultural Workers Not Elsewhere Classified</u>           |           |
| 61900     | Agricultural worker nec  | 61090     |
| <b>62</b> | <b>FISHERY WORKERS</b>   |           |
| 622       | FISHERY WORKERS  |           |
| 6221      | <u>Aquaculture Workers</u>                                     |           |
| 62211     | Fish/Prawn farm worker   | 62011     |
| 62212     | Aquarium fish farm worker                                      | 62012     |
| 62213     | Crocodile farm worker  | 62013     |
| 62219     | Other aquatic life cultivation workers (eg oyster farm worker) | 62019     |

Major Group 6: Agricultural and Fishery Workers

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| SSOC 2010 | OCCUPATION   | SSOC 2005 |
|-----------|--|-----------|
| 6222      | <u>Coastal Waters and Deep Sea Fishery Workers</u> |           |
| 62220     | Coastal waters/Deep sea fishery worker             | 62020     |

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| SSOC 2010 | OCCUPATION  | SSOC 2005             |
|-----------|---|-----------------------|
| <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   | 71111<br>71119 (part) |
| 7113      | <u>Stone Cutters, Splitters, Carvers and Stonemasons</u>                  |                       |
| 71131     | Stone cutter/Carver   | 79001                 |
| 71132     | Stonemason  | 71119 (part)          |
| 7114      | <u>Concrete Placers, Concrete Finishers and Related Workers</u>           |                       |
| 71141     | Reinforced concreter (general)  | 71121                 |
| 71142     | Concrete form worker  | 71122                 |
| 71143     | Cement finisher/Screeder  | 71124                 |
| 71144     | Cementer (petroleum and gas wells)  | 71125                 |
| 71149     | Other concrete placers, concrete finishers and related workers            | 71129                 |
| 7115      | <u>Carpenters and Joiners</u>   |                       |
| 71151     | Carpenter   | 71141                 |
| 71152     | Joiner  | 71142                 |
| 7119      | <u>Building Frame and Related Trades Workers Not Elsewhere Classified</u> |                       |
| 71191     | Scaffolder  | 71292                 |
| 71192     | Demolition worker   | 71293                 |
| 71193     | Cladding/Curtain wall erector   | 71295                 |
| 71199     | Other building frame and related trades workers nec (eg steeplejack)      | 71299 (part)          |
| 712       | BUILDING FINISHERS AND RELATED TRADES WORKERS                             |                       |
| 7121      | <u>Roofers</u>  |                       |
| 71210     | Roofer  | 71130                 |

Major Group 7: Craftsmen and Related Trades Workers

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| 7122      | <u>Floor Layers and Tile Setters</u>  |                 |
| 71220     | Floor/Wall tiler  | 71112,<br>71143 |
| 7123      | <u>Plasterers</u>   |                 |
| 71230     | Plasterer   | 71150           |
| 7124      | <u>Insulation Workers</u>   |                 |
| 71241     | Building insulator  | 71161           |
| 71242     | Boiler/Pipe insulator   | 71162           |
| 71243     | Refrigeration/Air-conditioning equipment insulator                            | 71163           |
| 71244     | Refractory worker   | 71164           |
| 71249     | Other insulation workers  | 71169           |
| 7125      | <u>Glaziers</u>   |                 |
| 71250     | Glazier   | 71170           |
| 7126      | <u>Plumbers, Pipe Fitters and Related Workers</u>                             |                 |
| 71261     | Plumber   | 72121           |
| 71262     | Pipe fitter   | 72122           |
| 71263     | Pipe/Drain layer  | 71294           |
| 7127      | <u>Air-Conditioning and Refrigeration Mechanics</u>                           |                 |
| 71271     | Air-conditioning /Refrigeration equipment mechanics                           | 72329 (part)    |
| 71272     | Air-conditioning/Refrigeration plant installer                                | 72335           |
| 7129      | <u>Building Finishers and Related Trades Workers Not Elsewhere Classified</u> |                 |
| 71290     | Building finisher and related trades worker nec                               | 71299 (part)    |
| 713       | <u>PAINTERS, BUILDING STRUCTURE CLEANERS AND RELATED WORKERS</u>              |                 |
| 7131      | <u>Building Painters and Related Workers</u>                                  |                 |
| 71311     | Building painter  | 71180           |
| 71312     | Wall/Ceiling paperhanger  | 71195           |
| 7132      | <u>Spray Painters, Varnishers and Other Painters</u>                          |                 |
| 71321     | Structural steel/Ship painter   | 71191           |
| 71322     | Motor vehicle spray painter   | 71193           |
| 71323     | Sign painter  | 71194           |
| 71324     | Spray painter (except ships, motor vehicles and signs)                        | 71192           |
| 71329     | Other painters and related workers  | 71199           |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 7133      | <u>Building Maintenance Workers, Building Structure Cleaners and Related Workers</u> |              |
| 71331     | Building maintenance worker  | 71291        |
| 71332     | Building structure cleaner and related worker  | 71299 (part) |
| <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 (part) |
| 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   | 72131        |
| 72122     | Flame cutter   | 72132        |
| 7213      | <u>Sheet Metal Workers</u>   |              |
| 72131     | Sheet metal worker (general)   | 72141        |
| 72132     | Boilermaker  | 72142        |
| 72133     | Panel beater   | 72143        |
| 72139     | Other sheet metal workers  | 72149        |
| 7214      | <u>Structural Metal Preparers and Erectors</u>                                       |              |
| 72141     | Structural steel worker (workshop)/fabricator  | 72151        |
| 72142     | Reinforcing iron worker/Steel reinforcement worker                                   | 71123        |
| 72143     | Structural steel erector   | 72152        |
| 72144     | Metal shipwright   | 72153        |
| 72145     | Ship plater  | 72154        |
| 72146     | Mould lofter   | 72155        |
| 72149     | Other structural metal preparers and erectors  | 72159        |

| SSOC 2010 | OCCUPATION   | SSOC 2005              |
|-----------|--|------------------------|
| 7215      | <u>Riggers and Cable Splicers</u>  |                        |
| 72151     | Hoisting equipment rigger (general)  | 72161                  |
| 72152     | Rope and cable splicer (general)   | 72162                  |
| 72153     | Hoisting equipment rigger (construction)   | 72163                  |
| 72154     | Ship rigger  | 72164                  |
| 72155     | Aircraft rigger  | 72165                  |
| 72156     | Oil and gas well drilling rigger   | 72166                  |
| 72159     | Other riggers and cable splicers   | 72169                  |
| 722       | BLACKSMITHS, TOOLMAKERS AND RELATED TRADES WORKERS   |                        |
| 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   | 72231                  |
| 72242     | Tool grinder (machine tools)   | 72232                  |
| 72249     | Other metal polishers, grinders and tool sharpeners  | 72239                  |
| 723       | MACHINERY MECHANICS, FITTERS AND REPAIRERS   |                        |
| 7231      | <u>Motor Vehicle Mechanics and Repairers</u>   |                        |
| 72311     | Motor vehicle mechanic   | 72310                  |
| 72312     | Motor vehicle body builder   | 74222                  |
| 7232      | <u>Aircraft Engine Mechanics and Repairers</u>   |                        |
| 72321     | Aircraft engine mechanic   | 72323                  |
| 72322     | Aircraft engine fitter   | 72332                  |
| 7233      | <u>Other Machinery Mechanics and Repairers</u>   |                        |
| 72331     | Machinery mechanic (general)   | 72321                  |
| 72332     | Machinery fitter (general)   | 72331                  |
| 72333     | Industrial/Office machinery mechanic   | 72322                  |
| 72334     | Marine engine fitter   | 72333                  |
| 72335     | Machinery erector/installer  | 72334                  |
| 72339     | Other machinery mechanics and repairers (eg agricultural machinery mechanic, bicycle repairer) | 72329 (part),<br>72339 |

| SSOC 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| <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   | 73114           |
| 73119     | Other precision instrument makers and repairers   | 73113,<br>73119 |
| 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  | 73211           |
| 73142     | Brick and tile moulder  | 73212           |
| 73149     | Other potters and related workers   | 73219           |
| 7315      | <u>Glass Makers, Cutters, Grinders and Finishers</u>  |                 |
| 73151     | Glass blower  | 73221           |
| 73152     | Glass lens moulder  | 73222           |
| 73153     | Optical glass cutter  | 73223           |
| 73154     | Lens grinding machine operator  | 73224           |
| 73155     | Lens polishing machine operator   | 73225           |
| 73159     | Other glass makers, cutters, grinders and finishers   | 73229           |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 7316      | <u>Sign Writers, Decorative Painters, Engravers and Etchers</u>           |              |
| 73161     | Glass engraver/etcher   | 73231        |
| 73162     | Glass and ceramic painter/decorator                                       | 73232        |
| 73169     | Other engravers and related decorative painters                           | 73239        |
| 732       | PRINTING TRADES WORKERS   |              |
| 7321      | <u>Pre-Press Trades Workers</u>   |              |
| 73211     | Compositor/Typesetter   | 73310        |
| 73212     | Stereotyper   | 73321        |
| 73213     | Electrotypewriter   | 73322        |
| 73214     | Photo-engraver  | 73331        |
| 73215     | Photogravure cameraman  | 73332        |
| 73216     | Photogravure retoucher  | 73333        |
| 73217     | Photogravure etcher   | 73334        |
| 73219     | Other pre-press trades workers  | 73339 (part) |
| 7322      | <u>Printers</u>   |              |
| 73221     | Silk screen/Block/Textile printer   | 73340        |
| 73229     | Other printers  | 73339 (part) |
| 74        | <b>ELECTRICAL AND ELECTRONIC TRADES WORKERS</b>                           |              |
| 740       | SUPERVISORS AND GENERAL FOREMEN (ELECTRICAL AND ELECTRONIC TRADES)        |              |
| 7400      | <u>Supervisors and General Foremen (Electrical and Electronic Trades)</u> |              |
| 74000     | Supervisor/General foreman (electrical and electronic trades)             | 72000 (part) |
| 741       | ELECTRICAL EQUIPMENT RELATED TRADES WORKERS                               |              |
| 7411      | <u>Electricians</u>   |              |
| 74110     | Electrician   | 72410        |
| 7412      | <u>Electrical Mechanics and Fitters</u>                                   |              |
| 74121     | Electrical fitter (general)   | 72421        |
| 74122     | Electrical lift, escalator and related equipment fitter                   | 72422        |
| 74123     | Electrical household appliance repairer                                   | 72423        |
| 74129     | Other electrical mechanics and fitters                                    | 72429        |
| 7413      | <u>Electrical Line Installers and Repairers</u>                           |              |
| 74131     | Electrical line installer   | 72471        |
| 74132     | Electric cable jointer  | 72473        |
| 74139     | Other electrical line installers and repairers                            | 72479        |

| SSOC 2010 | OCCUPATION   | SSOC 2005 |
|-----------|--|-----------|
| 742       | <b>ELECTRONICS AND TELECOMMUNICATIONS RELATED TRADES WORKERS</b>   |           |
| 7421      | <u>Electronics Mechanics and Servicers</u>   |           |
| 74211     | Electronics fitter (general)   | 72431     |
| 74212     | Consumer audio and video equipment mechanic  | 72440     |
| 74219     | Other electronics fitters  | 72439     |
| 7422      | <u>Information and Communications Technology Installers and Servicers</u>                                  |           |
| 74221     | Radio, television and radar broadcasting/transmitting equipment fitter                                     | 72432     |
| 74222     | Computer and related electronic equipment mechanic   | 72450     |
| 74223     | Telecommunications lineman   | 72472     |
| 74224     | Telecommunications installer/servicer  | 72460     |
| <b>75</b> | <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)             | 74000     |
| 751       | <b>FOOD PROCESSING AND RELATED TRADES WORKERS</b>  |           |
| 7511      | <u>Meat and Fish Preparers</u>   |           |
| 75111     | Slaughterer  | 74111     |
| 75119     | Other meat and fish preparers  | 74119     |
| 7512      | <u>Bakers, Pastry and Confectionery Makers</u>   |           |
| 75121     | Baker (general)  | 74121     |
| 75122     | Bread baker  | 74122     |
| 75123     | Pastry and confectionery maker   | 74123     |
| 7515      | <u>Food and Beverage Tasters and Graders</u>   |           |
| 75151     | Coffee and tea taster  | 74131     |
| 75159     | Other food and beverage tasters and graders  | 74139     |
| 7519      | <u>Food Processing and Related Trades Workers Not Elsewhere Classified</u>                                 |           |
| 75190     | Food processing and related trades worker nec (eg fruit pickler)   | 74190     |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| 752       | WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS                    |           |
| 7521      | <u>Wood Treaters</u>  |           |
| 75211     | Kiln drier  | 74211     |
| 75212     | Wood-treating worker  | 74212     |
| 75219     | Other wood treaters   | 74219     |
| 7522      | <u>Cabinet Makers and Wood Related Trades Workers</u>                       |           |
| 75221     | Cabinet and furniture maker   | 74221     |
| 75222     | Wood furniture finisher   | 74223     |
| 75223     | Picture frame maker   | 74224     |
| 75229     | Other cabinet makers and wood related trades workers                        | 74229     |
| 7529      | <u>Furniture Makers and Related Trades Workers Not Elsewhere Classified</u> |           |
| 75291     | Rattan furniture maker  | 74291     |
| 75299     | Other furniture makers and related trades workers nec                       | 74299     |
| 753       | GARMENT, LEATHER AND RELATED TRADES WORKERS                                 |           |
| 7531      | <u>Tailors/Dressmakers</u>  |           |
| 75310     | Tailor/Dressmaker   | 74310     |
| 7532      | <u>Garment and Related Pattern-Makers and Cutters</u>                       |           |
| 75321     | Garment cutter  | 74320     |
| 75322     | Garment pattern-maker   | 74331     |
| 75323     | Garment marker  | 74332     |
| 75329     | Other garment and related pattern-makers and cutters                        | 74339     |
| 7534      | <u>Upholsterers and Related Workers</u>                                     |           |
| 75341     | Furniture upholsterer   | 74341     |
| 75342     | Vehicle upholsterer   | 74342     |
| 75343     | Mattress maker  | 74343     |
| 75349     | Other upholsterers and related workers                                      | 74349     |
| 7536      | <u>Shoemakers and Related Workers</u>                                       |           |
| 75361     | Shoemaker   | 74401     |
| 75362     | Orthopaedic footwear maker  | 74402     |
| 75363     | Cobbler   | 74403     |
| 75364     | Leather goods maker/assembler   | 74404     |
| 75369     | Other shoemakers and related workers  | 74409     |

Major Group 7: Craftsmen and Related Trades Workers

| SSOC 2010 | OCCUPATION  | SSOC 2005                                  |
|-----------|---|--|
| 7539      | <u>Garment and Related Trades Workers Not Elsewhere Classified</u>                |  |
| 75390     | Garment and related trades worker nec (eg fellmonger, tent sewer, umbrella maker) | 74391,<br>74392,<br>74399,<br>79009 (part) |
| 754       | OTHER CRAFT AND RELATED WORKERS   |  |
| 7540      | <u>Other Craft and Related Workers</u>  |  |
| 75401     | Fumigators/Pest and weed controllers  | 51393                                      |
| 75402     | Underwater diver  | 71299 (part)                               |
| 75409     | Other craft and related workers nec   | 79009 (part)                               |

| SSOC 2010     | OCCUPATION   | SSOC 2005              |
|---------------|--|------------------------|
| <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<br>81000 | <u>Stationary Plant and Machine Supervisors and General Foremen</u><br>Stationary plant and machine supervisor/general foreman | 81000,<br>82000 (part) |
| 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)   | 81111                  |
| 81132         | Well driller/borer (except oil and gas wells)  | 81112                  |
| 81133         | Deep-boring machine operator   | 81113                  |
| 81139         | Other well drillers and borers and other mining related workers  | 79009 (part),<br>81119 |
| 8114          | <u>Cement and Other Mineral Products Machine Operators</u>   |                        |
| 81141         | Precast concrete product making machine operator   | 82121                  |
| 81142         | Asbestos cement product making machine operator  | 82122                  |
| 81143         | Terrazzo tile making machine operator  | 82123                  |
| 81144         | Concrete mixing plant operator (including concrete mixer operator)   | 82124                  |
| 81145         | Concrete pump operator   | 82129 (part)           |
| 81149         | Other mineral products and processing machine operators  | 81900,<br>82129 (part) |
| 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)  | 81210,<br>81221        |
| 81212         | Centrifugal casting machine operator   | 81222                  |
| 81213         | Die casting machine operator   | 81223                  |
| 81214         | Continuous rod casting machine operator (non-ferrous metal)  | 81224                  |
| 81215         | Metal rolling mill worker  | 81225                  |
| 81219         | Other metal melters, casters and rolling mill operators  | 81229                  |
| 8122          | <u>Metal Heat Treating Plant Operators</u>   |                        |
| 81220         | Metal heat treating plant operator   | 81230                  |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 8123      | <u>Metal Drawers and Extruders</u>  |              |
| 81231     | Wire drawer   | 81241        |
| 81232     | Seamless pipe and tube drawer   | 81242        |
| 81233     | Extruder operator (metal)   | 81243        |
| 81239     | Other metal drawers and extruders   | 81249        |
| 8124      | <u>Metal Finishing, Plating and Coating Machine Operators</u>                       |              |
| 81241     | Electro-plater  | 82221        |
| 81242     | Hot-dip plater  | 82222        |
| 81243     | Wire-coating machine operator   | 82223        |
| 81244     | Galvaniser  | 82224        |
| 81245     | Metal sprayer   | 82225        |
| 81246     | Anodiser  | 82226        |
| 81247     | Sandblaster/Shotblaster (metal)   | 82227        |
| 81248     | Metal cleaner   | 82228        |
| 81249     | Other metal finishing, plating and coating machine operators                        | 82229        |
| 8125      | <u>Machine-Tool Setter-Operators</u>  |              |
| 81251     | Metalworking machine setter-operator (general)                                      | 82111        |
| 81252     | Lathe setter-operator   | 82112        |
| 81253     | Milling machine setter-operator   | 82113        |
| 81254     | Planing machine setter-operator   | 82114        |
| 81255     | Boring/Drilling machine setter-operator   | 82115        |
| 81256     | Shaping and honing machine setter-operator  | 82116        |
| 81257     | Precision grinding machine setter-operator  | 82117        |
| 81258     | Numerical control machine setter-operator   | 82118        |
| 81259     | Other machine-tool setter-operators   | 82119        |
| 813       | CHEMICAL PROCESSING, CHEMICAL AND PHOTOGRAPHIC PRODUCTS PLANT AND MACHINE OPERATORS |              |
| 8131      | <u>Chemical Processing and Chemical Products Plant and Machine Operators</u>        |              |
| 81311     | Crushing/Grinding/Chemical mixing equipment operator                                | 81501        |
| 81312     | Chemical heat treating plant operator   | 81502        |
| 81313     | Chemical filtering and separating equipment operator                                | 81503        |
| 81314     | Chemical still/reactor operator   | 81504        |
| 81315     | Synthetic fibre making machine operator   | 81507        |
| 81319     | Other chemical processing and chemical products plant and machine operators         | 81509        |
| 8132      | <u>Photographic Products Machine Operators</u>                                      |              |
| 81320     | Photographic products machine operator  | 82230        |
| 8133      | <u>Pharmaceutical and Toiletry Products Machine Operators</u>                       |              |
| 81331     | Pharmaceutical products machine operator  | 82210 (part) |
| 81332     | Soap-making machine operator  | 81508        |
| 81339     | Other toiletry products machine operators   | 82210 (part) |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| 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 nec                              | 82290     |
| 814       | RUBBER, PLASTIC AND PAPER PRODUCTS MACHINE OPERATORS  |           |
| 8141      | <u>Rubber Products Machine Operators</u>  |           |
| 81411     | Rubber millman  | 82311     |
| 81412     | Rubber laminating machine operator  | 82312     |
| 81419     | Other rubber products machine operators   | 82319     |
| 8142      | <u>Plastic Products Machine Operators</u>   |           |
| 81420     | Plastic products machine operator   | 82320     |
| 8143      | <u>Paper and Paperboard Products Machine Operators</u>  |           |
| 81431     | Carton/Paper box making machine operator  | 82531     |
| 81432     | Paper product making machine operator   | 82532     |
| 81439     | Other paper and paperboard products machine operators   | 82539     |
| 815       | TEXTILE, FUR AND LEATHER PRODUCTS MACHINE OPERATORS   |           |
| 8151      | <u>Fibre Preparing, Spinning and Winding Machine Operators</u>  |           |
| 81511     | Spinner (thread and yarn)   | 82611     |
| 81512     | Winder (thread and yarn)  | 82612     |
| 8152      | <u>Weaving and Knitting Machine Operators</u>   |           |
| 81521     | Weaving machine operator  | 82621     |
| 81522     | Knitting machine operator   | 82622     |
| 8153      | <u>Sewing Machine Operators</u>   |           |
| 81531     | Sewing machine operator   | 82631     |
| 81532     | Machine embroiderer   | 82632     |
| 8154      | <u>Bleaching, Dyeing and Fabric Cleaning Machine Operators</u>  |           |
| 81541     | Textile bleaching machine operator  | 82641     |
| 81542     | Dyeing machine operator   | 82642     |
| 81543     | Textile washing/Shrinking machine operator  | 82643     |
| 81549     | Other bleaching, dyeing and fabric cleaning machine operators   | 82649     |

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 8159      | <u>Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified</u>                         |              |
| 81591     | Laundry and dry cleaning worker (machine, non-household)  | 91210 (part) |
| 81599     | Other textile, fur and leather products machine operators nec (eg shoemaking and related machine operators) | 82690        |
| 816       | FOOD AND RELATED PRODUCTS MACHINE OPERATORS   |              |
| 8161      | <u>Meat and Fish Products Machine Operators</u>   |              |
| 81611     | Sausage making machine operator   | 82711        |
| 81619     | Other meat and fish processing machine operators  | 82719        |
| 8162      | <u>Dairy and Confectionery Products Machine Operators</u>   |              |
| 81621     | Dairy product processing machine operator (general)   | 82721        |
| 81622     | Dairy product pasteurising machine operator   | 82722        |
| 81623     | Butter making machine operator  | 82723        |
| 81624     | Ice-cream making machine operator   | 82724        |
| 81625     | Chocolate making machine operator   | 82725        |
| 81626     | Confectionery making machine operator   | 82726        |
| 81629     | Other dairy and confectionery products machine operators  | 82729        |
| 8163      | <u>Grain and Spice Milling Machine Operators</u>  |              |
| 81630     | Grain/Spice milling machine operator  | 82730        |
| 8164      | <u>Baked and Cereal Products Machine Operators</u>  |              |
| 81641     | Biscuit making machine operator   | 82741        |
| 81642     | Macaroni/Noodle/Vermicelli making machine operator  | 82742        |
| 81649     | Other baked and cereal products machine operators   | 82749        |
| 8165      | <u>Fruit, Vegetable and Nut Products Machine Operators</u>  |              |
| 81651     | Fruit-press operator  | 82751        |
| 81652     | Oil pressman (edible oils)  | 82752        |
| 81653     | Refining machine operator (oils and fats)   | 82753        |
| 81654     | Hydrogenation operator (oils and fats)  | 82754        |
| 81655     | Sauce making machine operator   | 82755        |
| 81659     | Other fruit, vegetable and nut processing machine operators   | 82759        |
| 8166      | <u>Sugar Processing and Refining Machine Operators</u>  |              |
| 81660     | Sugar processing and refining machine operator  | 82760        |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| 8167      | <u>Brewers and Wine and Other Beverage Machine Operators</u>                |           |
| 81671     | Germination worker (malting)  | 82771     |
| 81672     | Kilnman (malting)   | 82772     |
| 81673     | Brewer  | 82773     |
| 81674     | Fermenting-room man   | 82774     |
| 81675     | Pasteuriser attendant (malt liquor)   | 82775     |
| 81676     | Syrup making machine operator   | 82776     |
| 81677     | Coffee/Tea blending machine operator  | 82791     |
| 81678     | Coffee/Cocoa bean roasting and grinding machine operator                    | 82792     |
| 81679     | Other brewers and wine and other beverage machine operators                 | 82779     |
| 8168      | <u>Tobacco Products Machine Operators</u>                                   |           |
| 81681     | Cigarette making machine operator   | 82781     |
| 81689     | Other tobacco products machine operators                                    | 82789     |
| 8169      | <u>Food and Related Products Machine Operators Not Elsewhere Classified</u> |           |
| 81691     | Bean curd making machine operator   | 82793     |
| 81692     | Ice making machine operator   | 82794     |
| 81693     | Feed mixing machine operator  | 82795     |
| 81694     | Fish feed making machine operator   | 82796     |
| 81699     | Other food and related products machine operators nec                       | 82799     |
| 817       | WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS                             |           |
| 8171      | <u>Pulp and Papermaking Plant Operators</u>                                 |           |
| 81711     | Paper pulp plant operator   | 81420     |
| 81712     | Papermaking machine operator  | 81431     |
| 81719     | Other pulp and papermaking plant operators                                  | 81439     |
| 8172      | <u>Wood Processing Plant Operators</u>                                      |           |
| 81721     | Sawyer  | 81411     |
| 81722     | Veneer Cutter   | 81412     |
| 81723     | Plywood core layer  | 81413     |
| 81724     | Plywood press operator  | 81414     |
| 81725     | Wood grader   | 81415     |
| 81729     | Other wood processing plant operators                                       | 81419     |
| 8173      | <u>Wood Products Machine Operators</u>                                      |           |
| 81731     | Woodworking machine setter-operator   | 82401     |
| 81732     | Precision wood sawyer   | 82402     |
| 81739     | Other wood products machine operators                                       | 82409     |

| SSOC 2010 | OCCUPATION   | SSOC 2005              |
|-----------|--|------------------------|
| 818       | OTHER STATIONARY PLANT AND MACHINE OPERATORS                           |                        |
| 8181      | <u>Glass and Ceramics Plant Operators</u>                              |                        |
| 81811     | Glass/Ceramics kiln machine operator                                   | 81310                  |
| 81812     | Fibreglass maker   | 81391                  |
| 81819     | Other glass and ceramics plant operators                               | 81399                  |
| 8182      | <u>Steam Engine and Boiler Operators</u>                               |                        |
| 81821     | Boiler fireman   | 81621                  |
| 81822     | Ship's fireman   | 81622                  |
| 81823     | Ship's oiler/greaser   | 81623                  |
| 81829     | Other steam turbine, boiler and engine operators                       | 81629                  |
| 8183      | <u>Packing, Bottling and Labelling Machine Operators</u>               |                        |
| 81830     | Packing/Bottling/Labelling machine operator                            | 82901,<br>82909 (part) |
| 8184      | <u>Printing, Binding and Related Machine Operators</u>                 |                        |
| 81841     | Printing machine operator  | 82510                  |
| 81842     | Bookbinding machine operator   | 82521                  |
| 81843     | Book embossing machine operator  | 82522                  |
| 81849     | Other printing, binding and related machine operators                  | 82529                  |
| 8185      | <u>Water Treatment and Related Machine Operators</u>                   |                        |
| 81851     | Stationary engine operator (general)                                   | 81691                  |
| 81852     | Compressor operator  | 81692                  |
| 81853     | Pumping station operator   | 81693                  |
| 81854     | Water treatment machine operator (waterworks)                          | 81694                  |
| 81855     | Refrigeration system operator  | 81695                  |
| 81859     | Other water treatment and related machine operators                    | 81699                  |
| 8186      | <u>Power Generating Plant Operators</u>                                |                        |
| 81860     | Power generating plant operator  | 81610                  |
| 8187      | <u>Petroleum and Natural Gas Refining Plant Operators</u>              |                        |
| 81871     | Petroleum and natural gas refining plant operator                      | 81505                  |
| 81872     | Cylinder filler/tester (compressed and liquefied gases)                | 81506                  |
| 8188      | <u>Automated Assembly Line and Industrial Robot Operators</u>          |                        |
| 81880     | Automated assembly line/Industrial robot operator                      | 81700                  |
| 8189      | <u>Stationary Plant and Machine Operators Not Elsewhere Classified</u> |                        |
| 81890     | Stationary plant and machine operator nec                              | 82909 (part)           |

| SSOC 2010     | OCCUPATION   | SSOC 2005    |
|---------------|--|--------------|
| <b>82</b>     | <b>ASSEMBLERS AND QUALITY CHECKERS</b>   |              |
| 820           | SUPERVISORS AND GENERAL FOREMEN OF ASSEMBLERS AND QUALITY CHECKERS   |              |
| 8200<br>82000 | <u>Supervisors and General Foremen of Assemblers and Quality Checkers</u><br>Supervisor/general foreman of assemblers and quality checkers | 82000 (part) |
| 821           | ASSEMBLERS, QUALITY CHECKERS AND TESTERS   |              |
| 8212          | <u>Electrical and Electronic Equipment Assemblers</u>  |              |
| 82121         | Electrical equipment/component assembler   | 82811        |
| 82122         | Electronic equipment/component assembler   | 82812        |
| 82123         | Battery assembler  | 82813        |
| 8213          | <u>Quality Checkers and Testers</u>  |              |
| 82131         | Electrical/Electronic products quality checker and tester  | 82821        |
| 82132         | Mechanical products quality checker and tester   | 82822        |
| 82139         | Other quality checkers and testers   | 82829        |
| 8219          | <u>Assemblers Not Elsewhere Classified</u>   |              |
| 82191         | Toy assembler  | 82814        |
| 82199         | Other assemblers nec (eg plastic products assembler, rubber products assembler)  | 82819        |
| <b>83</b>     | <b>DRIVERS AND MOBILE MACHINERY OPERATORS</b>  |              |
| 830           | MOBILE MACHINERY SUPERVISORS AND GENERAL FOREMEN   |              |
| 8300<br>83000 | <u>Mobile Machinery Supervisors and General Foremen</u><br>Mobile machinery supervisor and general foreman                                 | 83000        |
| 831           | MRT TRAIN OPERATORS AND RELATED WORKERS  |              |
| 8311<br>83110 | <u>MRT Train Operators</u><br>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 2010 | OCCUPATION  | SSOC 2005       |
|-----------|---|-----------------|
| 832       | CAR AND LIGHT GOODS VEHICLE DRIVERS                                   |                 |
| 8321      | <u>Motorcycle Delivery Men</u>  |                 |
| 83210     | Motorcycle delivery man   | 83210           |
| 8322      | <u>Car, Taxi and Van Drivers</u>                                      |                 |
| 83221     | Taxi driver   | 83220           |
| 83222     | Chauffeur   | 83241           |
| 83223     | Van driver  | 83242           |
| 8329      | <u>Car and Light Goods Vehicle Drivers Not Elsewhere Classified</u>   |                 |
| 83291     | Ambulance driver  | 83243           |
| 83299     | Other car and light goods vehicle drivers nec                         | 83249           |
| 833       | HEAVY TRUCK AND BUS DRIVERS   |                 |
| 8331      | <u>Bus and Tram Drivers</u>   |                 |
| 83311     | Bus driver  | 83250           |
| 83312     | Tram driver   | new item        |
| 8332      | <u>Heavy Truck and Lorry Drivers</u>                                  |                 |
| 83321     | Lorry driver  | 83260           |
| 83322     | Trailer-truck driver  | 83271           |
| 83323     | Fire-engine driver  | 83272           |
| 83324     | Airport mobile equipment driver                                       | 83273           |
| 83329     | Other heavy truck and lorry drivers                                   | 83279           |
| 834       | MOBILE MACHINERY OPERATORS  |                 |
| 8342      | <u>Earth Moving and Related Machinery Operators</u>                   |                 |
| 83421     | Excavating/Trench digging machine operator                            | 83311,<br>83312 |
| 83422     | Bulldozer operator  | 83313           |
| 83423     | Dredge operator   | 83314           |
| 83424     | Pile driver/Drilling machine operator                                 | 83315           |
| 83425     | Road making machine operator  | 83316           |
| 83426     | Tunnelling machine operator (including pipe jacking machine operator) | 83319 (part)    |
| 83429     | Other earth moving and related machinery operators                    | 83319 (part)    |
| 8343      | <u>Crane, Hoist and Related Equipment Operators</u>                   |                 |
| 83431     | Crane/Hoist operator (general)  | 83321 (part)    |
| 83432     | Crane operator (port)   | 83321 (part)    |
| 83439     | Other crane, hoist and related equipment operators                    | 83329           |

Major Group 8: Plant and Machine Operators and Assemblers

| SSOC 2010 | OCCUPATION  | SSOC 2005                 |
|-----------|---|---------------------------|
| 8344      | <u>Lifting Truck Operators</u>                                |                           |
| 83441     | Fork lift truck operator                                      | 83331                     |
| 83449     | Other lifting truck operators                                 | 83339                     |
| 8349      | <u>Mobile Machinery Operators Not Elsewhere Classified</u>    |                           |
| 83490     | Mobile machinery operator nec (eg mobile farm plant operator) | 83390                     |
| 835       | SHIPS' DECK CREW AND RELATED WORKERS                          |                           |
| 8350      | <u>Ships' Deck Crew and Related Workers</u>                   |                           |
| 83501     | Helmsman/Steersman  | 83402                     |
| 83502     | Deckhand (including lighterman)                               | 83401,<br>83403,<br>83404 |
| 83509     | Other ships' deck crew and related workers                    | 83409                     |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| <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  | 51909 (part) |
| 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   | 91221        |
| 91122     | Hotel cleaner  | 91229 (part) |
| 91129     | Other cleaners and helpers in hotels and related establishments  | 91229 (part) |
| 9113      | <u>Cleaners in Offices and Other Establishments</u>              |              |
| 91131     | Office cleaner   | 91291        |
| 91132     | Cleaner (industrial establishment)                               | 91292        |
| 91139     | Cleaner in offices and other establishments nec                  | 91299 (part) |
| 912       | VEHICLE, WINDOW, LAUNDRY AND OTHER HAND CLEANING WORKERS         |              |
| 9121      | <u>Hand Launderers and Pressers</u>                              |              |
| 91210     | Hand launderer/presser (non-household)                           | 91210 (part) |
| 9122      | <u>Vehicle Cleaners</u>  |              |
| 91220     | Motor vehicle cleaner/polisher                                   | 91310        |
| 9123      | <u>Window Cleaners</u>   |              |
| 91230     | Window cleaner   | 91299 (part) |
| 9129      | <u>Cleaning Workers Not Elsewhere Classified</u>                 |              |
| 91291     | Ship/Ship tank cleaner   | 91391        |
| 91292     | Aircraft cleaner   | 91392        |
| 91293     | Railway carriage cleaner (include MRT, LRT and monorail)         | 91393        |
| 91299     | Other cleaning workers nec                                       | 91399        |

| SSOC 2010 | OCCUPATION  | SSOC 2005 |
|-----------|---|-----------|
| 913       | <b>DOMESTIC HELPERS AND CLEANERS</b>  |           |
| 9130      | <u>Domestic Helpers and Cleaners</u>  |           |
| 91301     | Domestic helper (general)   | 91101     |
| 91302     | Launderer (household)   | 91102     |
| 91309     | Other domestic helpers and cleaners   | 91109     |
| <b>92</b> | <b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b>                                  |           |
| 921       | <b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b>                                  |           |
| 9214      | <u>Park and Garden Maintenance Workers</u>  |           |
| 92141     | Garden labourer   | 93111     |
| 92142     | Grass cutter  | 93112     |
| 92143     | Tree cutter   | 93113     |
| 92149     | Other park and garden maintenance workers (including landscape worker)              | 93119     |
| 9219      | <u>Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified</u> |           |
| 92190     | Agricultural and fishery labourer and related worker nec (eg farm labourer)         | 93190     |
| <b>93</b> | <b>LABOURERS AND RELATED WORKERS</b>  |           |
| 931       | <b>CONSTRUCTION LABOURERS AND RELATED WORKERS</b>                                   |           |
| 9310      | <u>Civil Engineering and Building Construction Labourers</u>                        |           |
| 93100     | Civil engineering/Building construction labourer                                    | 93300     |
| 932       | <b>MANUFACTURING LABOURERS AND RELATED WORKERS</b>                                  |           |
| 9320      | <u>Manufacturing Labourers and Related Workers</u>                                  |           |
| 93201     | Hand packer   | 93901     |
| 93209     | Manufacturing labourer and related worker nec (eg rubber sheets clipper and sorter) | 93200     |
| 933       | <b>TRANSPORT AND STORAGE LABOURERS</b>  |           |
| 9331      | <u>Hand and Pedal Vehicle Drivers</u>   |           |
| 93310     | Hand/Pedal vehicle driver   | 93420     |

| SSOC 2010 | OCCUPATION   | SSOC 2005    |
|-----------|--|--------------|
| 9333      | <u>Material and Freight Handling Workers</u>       |              |
| 93331     | Stevedore  | 93411        |
| 93332     | Railway/Road vehicle loader                        | 93412        |
| 93333     | Aircraft loader                                    | 93413        |
| 93334     | Godown labourer                                    | 93414        |
| 93335     | Lorry attendant                                    | 93415        |
| 93336     | Mover  | 93419 (part) |
| 93339     | Other material and freight handling workers        | 93419 (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                                  | 91222 (part) |
| 94102     | Food/Drink stall assistant                         | 91223        |
| 94103     | Fast food preparer                                 | 91222 (part) |
| 94104     | Dish washer/Plate collector                        | 91224        |
| <b>96</b> | <b>REFUSE WORKERS AND OTHER ELEMENTARY WORKERS</b> |              |
| 961       | REFUSE WORKERS                                     |              |
| 9611      | <u>Garbage and Recycling Collectors</u>            |              |
| 96111     | Garbage disposal worker                            | 91411        |
| 96112     | Refuse sorter                                      | 91419 (part) |
| 96119     | Other garbage and recycling collectors             | 91419 (part) |
| 9613      | <u>Sweepers and Related Workers</u>                |              |
| 96130     | Sweeper and related worker                         | 91420        |
| 962       | PORTERS, ATTENDANTS AND RELATED WORKERS            |              |
| 9621      | <u>Porters and Related Workers</u>                 |              |
| 96211     | Bell captain                                       | 92010        |
| 96212     | Bellboy/Hotel porter                               | 92020        |
| 96213     | Porter (except hotel)                              | 92030        |

Major Group 9: Cleaners, Labourers and Related Workers

| SSOC 2010 | OCCUPATION  | SSOC 2005    |
|-----------|---|--------------|
| 9625      | <u>Attendants</u>   |              |
| 96251     | Office/Library attendant                                  | 92041        |
| 96252     | Laboratory attendant                                      | 92042        |
| 96253     | Hospital/Clinic attendant                                 | 92043        |
| 96254     | Car park attendant  | 92044        |
| 96259     | Other attendants (eg swimming pool attendant)             | 92049        |
| 9626      | <u>Watchmen and Related Workers</u>                       |              |
| 96261     | Building caretaker/Watchman                               | 92051        |
| 96262     | Doorman   | 92052        |
| 96269     | Other watchmen and related workers (eg lighthouse keeper) | 92059        |
| 9629      | <u>Other Elementary Workers</u>                           |              |
| 96291     | Leaflet and newspaper distributor/deliverer               | 51509 (part) |
| 96292     | Meter reader/Vending-machine collector                    | 51901        |
| 96293     | Odd job person  | 93909 (part) |
| 96299     | Other elementary workers nec                              | 93909 (part) |

Major Group X: Workers not Classifiable by Occupation

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| SSOC 2010 | OCCUPATION   | SSOC 2005 |
|-----------|--|-----------|
| <b>X</b>  | <b><u>WORKERS NOT CLASSIFIABLE BY OCCUPATION</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     |

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## 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 Classifiable by Occupation**

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

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

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“.

Notes 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

**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, mining, construction and distribution 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 Managers**

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

Tasks include:

- determining educational programmes based on frameworks established by education authorities and governing bodies
- implementing systems and procedures to monitor school 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 and lecturers by visiting classrooms, observing teaching methods, reviewing instructional objectives and examining learning materials
- promoting the educational programme and representing the service or institution in the wider community
- supervising the maintenance of educational facilities

- developing and enforcing a disciplinary code to create a safe and conducive environment for students and teachers
- controlling selection, training and supervision of staff

This unit group includes:

- School principal
- Registrar (institution of higher learning)
- Dean (institution of higher learning)

#### 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
- Risk 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, library, 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:

- Library and archive manager
- 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 „Technicians and associate professionals“ 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 (5120)

#### 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

**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:

- 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 (2214)
- Radiologist (2214)
- Radiographer (3211)

**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 (3314)
- 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 (3314)
- 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 Fisheries Advisers**

Farming, forestry and fisheries 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

This unit group includes:

- Anatomist
- Biochemist
- Biophysicist
- Physiologist
- Pharmacologist

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
- Robot 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 engineer 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

This unit group includes:

- Biomedical engineer
- Materials engineer
- Industrial safety engineer
- Quantity surveyor
- Food and drink technologist

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)

## 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
- Mine surveyor
- Photogrammetrist

This unit group excludes:

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

**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)
- 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)
- Pathologist (2213)
- 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) surgeon (2214)

#### 2214 **Specialist Medical Practitioners (Other Specialisations)**

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) surgeon
- 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)

## 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
- Chinese physician

This unit group excludes:

- Chiropractor (3259)
- Osteopath (3259)

**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:

- Dispensing pharmacist
- Druggist
- Hospital pharmacist
- Retail pharmacist

This unit group excludes:

- Pharmacologist (2134)
- Pharmaceutical 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 (3256)
- Environmental public health inspector (3257)

**2269 Other Health Professionals Not Elsewhere Classified**

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

**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 (2320)

**2320 Vocational Education Teachers**

Vocational education teachers 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

**2330 Secondary Education Teachers**

Secondary education teachers teach one or more subjects at junior college (including pre-university) and 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:

- Junior college teacher
- Pre-university teacher
- Secondary school teacher
- Technical education teacher (secondary school)

This unit group excludes:

- School cluster superintendent (1345)

### 2340 **Primary School Teachers**

Primary school teachers teach a range of subjects at the primary education 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 (3611)
- Early childhood educators (3611)

**2351 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)

**2352 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 (2320)
- Secondary school teacher (2330)
- Primary school teacher (2340)

#### 2359 **Other Teaching Professionals Not Elsewhere Classified**

This unit group covers teaching professionals not classified elsewhere in Sub-Major Group 23 „Teaching 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
- Chartered accountant
- Auditor

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

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)

## 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 consultants (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 (3346)
- Training officer (3346)

### 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:

- provide consultancy services on planning and organising publicity campaigns and communication strategies
- undertaking and commissioning public opinion research, analysing the findings and planning public relations and promotional campaigns

This unit group includes:

- Public relations consultant

This unit group excludes:

- Public relations officer (3345)

## 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

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

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 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:

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

## 2523 **Computer Network 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

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 elsewhere in Minor Group 252 „Database and network professionals“.

**2611 Lawyers**

Lawyers give clients legal advice on a wide variety of subjects, draw up legal documents, represent clients before administrative boards or tribunals and plead cases or conduct prosecutions in courts of justice. 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

This unit group excludes:

- Judge (2612)
- Legal clerk (4417)

## 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

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:

- Addictions counsellor
- 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)

## 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 (3435)
- Graphic and multimedia designers (3435)
- 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

## 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.

**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 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 work 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)
- Pharmaceutical 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

This unit group includes:

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

This unit group excludes:

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

### 3151 **Ships' Engineers**

Ships' engineers 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:

- Ship's engineer
- Marine engineer officer

This unit group excludes:

- Marine engineer (shore-based) (2144)

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

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

Tasks include:

- commanding and 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:

- Deck hand (8350)
- Helmsman (8350)

**3153 Aircraft Pilots and Related Associate Professionals**

Aircraft pilots and related associate professionals 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.

Tasks include:

- flying and navigating aircraft in accordance with established control and operating procedures
- preparing and submitting flight plan or examining standard flight plan
- controlling the operation of mechanical, electrical and electronic equipment and ensuring that all instruments and controls work properly
- applying knowledge of principles and practices of flying in order to identify and solve problems arising in the course of their work
- 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:

- Flight engineer
- Flight navigator
- Flying instructor (except air force)
- Helicopter pilot (air transport)

**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.

This unit group includes:

- Port captain
- Air cargo officer
- Ship charterer

**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. They may administer radiation treatments to patients under the supervision of a radiologist or other health professional.

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
- 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:

- Medical diagnostic radiographer
- Mammographer
- Sonographer
- Medical x-ray technician

This unit group excludes:

- Diagnostic radiologist (2214)

**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 Pharmaceutical Technicians**

Pharmaceutical 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:

- Pharmaceutical 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 nursing and personal care for people who are physically or mentally ill, disabled or infirm, in support of implementation of health care, treatment and referrals plans usually established by medical and other health professionals. They usually work under the direction of other health professionals and perform tasks of more limited range and complexity than medical and health professionals.

Tasks include:

- assessing, planning and providing personal and nursing care, treatment and advice to the sick, injured, disabled and others in need of care within a defined scope of practice
- administering medications and other treatments and monitoring responses to treatment
- cleaning wounds and applying surgical dressings under the guidance of medical doctors
- monitoring and observing patients' condition and maintaining a record of observations and treatment
- assisting in planning and managing the care of individual patients
- assisting in giving first-aid treatment in emergencies

This unit group includes:

- Assistant nurse
- Professional nurse

This unit group excludes:

- Nursing aide (clinic, hospital) (5320)
- Health care assistant (5320)
- Veterinary nurse (3240)

### 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
- setting and healing fractured and dislocated bones using traditional methods of manipulation, herbal preparations and oils

- advising the individuals and the community on proper diet and behaviour to preserve or improve health and well-being
- drawing blood to the surface of the body or 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:

- Chinese herbalist
- Faith healer
- Chiroprapist
- Herbalist
- Homeopath
- Naturopath

This unit group excludes:

- Chinese physician (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 Nurses and Therapists**

Dental nurses 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 health therapist
- Oral health therapist
- Dental nurse

This unit group excludes:

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

### 3252 **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
- Public health nutritionist

### 3253 **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

**3254 Optometrists and Opticians**

Optometrists and opticians 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:

- Optician (ophthalmic)
- Dispensing optician
- Refracting optician
- Optometrist
- Orthoptist

This unit group excludes:

- Ophthalmologist (2214)

**3255 Physiotherapists and Related Associate Professionals**

Physiotherapists and related associate 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
- Sports trainer
- Sports masseur
- Electrotherapist

This unit group excludes:

- Podiatrist (3259)
- Chiropractor (3259)
- Osteopath (3259)
- Occupational therapist (3256)

### 3256 **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

### 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“. For instance, the group includes occupations such as chiropractor, osteopath, podiatrist and other health associate professionals.

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
- providing therapy to alleviate the problem
- planning and directing programmes through the use of recreational, activities on an individual and group basis
- 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
- preparing written reports on the state of patients' injuries and treatment provided

This unit group includes:

- Osteopath
- Chiropractor
- Podiatrist
- Paramedic
- Community health worker

This unit group excludes:

- Ambulance driver (8329)

### 3311 **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)

### 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)

3314 **Statistical, Mathematical and Actuarial Associate Professionals**

Statistical, mathematical and actuarial associate professionals assist in planning the collection, processing and presentation of statistical, mathematical or actuarial data and in carrying out these operations, usually working under the guidance of statisticians, mathematicians and actuaries.

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)

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 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**

Insurance representatives 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
- 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:

- Financial planner
- Insurance agent
- Insurance broker
- Insurance underwriter

This unit group excludes:

- Actuary (2121)
- Insurance assessor (3315)
- Insurance clerk (4312)
- Securities dealer (3311)

### 3322 **Commercial and Marketing Sales Representatives**

Commercial and marketing sales representatives 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 clients to ensure satisfaction with products purchased

This unit group includes:

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

This unit group excludes:

- 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 (3324)

#### 3324 **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 (3311)
- Securities broker (3311)
- Securities dealer (3311)
- Financial futures broker (3311)
- Insurance broker (3321)

#### 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“.

#### 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, here should be classified 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. 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

This unit group includes:

- Auctioneer
- Advertising representative/salesman
- Literary agent
- Sports agent

### 3345 **Public Relations Associate Professionals**

Public relations associate professionals promote the image and understanding of an organisation and its products or services to consumers, businesses, members of the public and other specified audiences.

Tasks include:

- discusses issues of business strategy, products, services and target client base with management to identify public relations requirements
- writes, edits and arranges for the effective distribution of press releases, news letters and other public relations material
- advising executives on the public relations implications of their policies, programmes and practices preparing and controlling the issue of news and press releases
- addresses individuals, clients and other target groups through meetings, presentations, the media and other events to enhance the public image of an organisation
- representing organisations and arranging interviews with publicity media

This unit group includes:

- Press liaison officer
- Public relations officer
- Corporate communications officer
- Public information officer

This unit group excludes:

- Public relations consultant (2432)

### 3346 **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, research officers (non-statistical) and various finance and banking operations executives are classified here.

This unit group includes:

- Research officer (non-statistical)
- Banking compliance executive
- Management executive (general)
- Trade finance executive

### 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, 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)
- Marriage 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 (7323)
- Photolithographer (7323)

**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

**3435 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)

**3436 Graphic and Multimedia Designers and Artists**

Graphic and multimedia designers and artists design information content for visual and audio communication, publication and display using print, 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
- formulating design concepts for the subject to be communicated
- 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

This unit group excludes:

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

#### 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:

- Book illustrator
- Commercial artist
- Poster artist
- Advertising illustrator
- Visualiser
- Tattooist
- Litho artist
- Lighting technician
- Stage technician

#### 3441 **Radio and Television Presenters and Related Associate Professionals**

Radio and television presenters and related associate 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)
- Disc jockey
- Dubbing artiste

This unit group excludes:

- Journalist (2642)

### 3442 **Clowns, Magicians, Acrobats and Related Associate Professionals**

Clowns, magicians, acrobats and related associate professionals entertain audiences by performing amusing, spectacular or exciting acts on stage or in circuses

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
- 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

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 (2320)
- Secondary school teacher (2330)
- Primary school teacher (2340)
- 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

**3910 Translators and Interpreters**

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)

**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 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 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 (3314)

**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)
- 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:

- Bus conductor
- 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 Chefs and Cooks**

Chefs and cooks 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 on the recruitment of kitchen staff and monitoring their performance
- preparing, seasoning and cooking of foodstuff
- regulating the temperature of ovens, grills, roasters and other cooking equipment; inspecting and cleaning the kitchen, kitchen equipment, serving areas etc to ensure safe and sanitary food handling practices
- operating large-volume cooking equipment such as grills, deep-fat fryers or griddles
- explaining and enforcing hygiene and food safety regulations

This unit group includes:

- Chef de cuisine (restaurant)
- Mess cook (ship)
- Pastry cook (restaurant)

**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**

Bartenders prepare, mix and serve alcoholic and non-alcoholic 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

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)

**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 facial and 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

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

### 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

### 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 (5223)
- Shop assistant (5223)
- 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 (5223)
- Shop assistant (5223)

**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

This unit group includes:

- Healthcare assistant
- Nursing aide (clinic, hospital)
- Home health aide
- Nursing aide (home)

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

This unit group includes:

- Security guard (private)
- Patrolman (private establishment)

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, including operators of audio equipment, cinema projectionists, billposters and divers doing salvaging work.

Tasks include:

- operating sound amplifying equipment such as loudspeakers and microphones
- operating projectors in cinemas
- pasting advertising posters
- diving under water to carry out salvaging work

This unit group includes:

- Cinema projectionist
- Billposter
- Frogman (salvage)
- Microphone operator

**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

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
- 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 (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:

- Coach body builder (wood)
- 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, ebonite, 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

- smoothening 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 smoothening 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

**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)
- Rod 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.

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.

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
- Cigar 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 Water Treatment and Related Machine Operators**

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
- Incinerator 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.

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 Assembly and Quality Check Supervisors and General Foremen**

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 Brakers and Related Workers**

Railway brakers, 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 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, 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:

- Chauffeur
- Taxi driver
- Van driver

This unit group excludes:

- Bus and tram drivers (8331)

#### 8329 **Car and Light Goods Vehicle Drivers Not Elsewhere Classified**

Car and light goods vehicle drivers not elsewhere classified drive and tend motor cars and vans to transport patients, mail or goods.

Tasks include:

- driving and tending passenger, ambulance or vans
- driving and tending vans or pick-up to deliver passenger, mail or goods
- collecting documents certifying deliveries
- operating telecommunications equipment to report location and availability and follow directions of control centre
- determining most appropriate route

This unit group includes:

- Ambulance driver
- Pick-up driver

This unit group excludes:

- Car, taxi and van drivers (8322)

#### 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

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 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:

- Mechanical 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 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

This unit group includes:

- Cleaning supervisor

**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
- cleaning kitchens and generally helping with kitchen work, including dishwashing
- 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 (9410)

**9113 Cleaners in Offices and Other Establishments**

Cleaners and helpers in offices and other establishments perform various cleaning tasks in order to keep clean and tidy the interiors and fixtures of offices and other establishments.

Tasks include:

- sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures in buildings
- cleaning pantries/kitchens and generally helping with kitchen-related work, including dishwashing

- picking up rubbish, emptying garbage containers and taking contents to waste areas for removal

This unit group includes:

- Office cleaner
- Factory cleaner
- MRT station cleaner

This unit group excludes:

- Window cleaner (9123)
- Kitchen assistant (9410)
- Dishwasher (9410)
- Building caretaker (9626)

### 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 implement

This unit group includes:

- Window cleaner

**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.

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

**9410 Food Preparation and Kitchen Assistants**

Food preparation and kitchen assistants clear tables, clean kitchen areas, wash dishes, preparing ingredients and perform other duties to assist workers who prepare or serve food and beverages. They may take orders from customers and serve at counters or tables.

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
- Plate collector

This unit group excludes:

- Cook (5120)

### 9611 **Garbage and Recycling Collectors**

Garbage and recycling collectors identify, collect and sort rubbish and discarded items for recycling from buildings, yards, streets and other places.

Tasks include:

- collecting rubbish and locating it into bins and garbage and recycling trucks
- sorting cardboard, paper, glass, plastic, aluminium or other recyclable materials by type and placing recyclable items and materials in designated compartments and containers for storage or transportation
- riding on or in garbage and recycling trucks
- lifting garbage bins and emptying contents into trucks and larger containers
- unloading garbage and recycling trucks
- identifying and setting aside items of furniture, equipment, machinery, or components that are suitable for repair or re-use
- selling recyclable or reusable materials

This unit group includes:

- Garbage disposal worker
- Refuse sorter

This unit group excludes:

- Park sweeper (9613)

### 9613 **Sweepers and Related Workers**

Sweepers and related workers sweep and clean streets, parks, airports, stations and other public places.

Tasks include:

- sweeping streets, parks, airports, stations and similar public places
- beating dust out of carpets by using a carpet-beater
- cleaning rubbish, leaves and snow from driveways and grounds

This unit group includes:

- Street sweeper (except driver, mechanical sweeper)
- Park sweeper

This unit group excludes:

- Garbage disposal worker (9611)

**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

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 2010 and SSOC 2005

**1 LEGISLATORS, SENIOR OFFICIALS AND MANAGERS**

**LEGISLATORS, SENIOR OFFICIALS AND MANAGERS**

| <b>SSOC 2010</b> |  | <b>SSOC 2005</b> |  |
|------------------|--|------------------|--|
| <b>11</b>        | <b>LEGISLATORS, SENIOR OFFICIALS AND AND CHIEF EXECUTIVES</b>                      | <b>11</b>        | <b>LEGISLATORS AND SENIOR OFFICIALS</b>  |
| 111              | LEGISLATORS AND SENIOR OFFICIALS   | 111              | LEGISLATORS  |
| 1111             | Legislators  | 1110             | Legislators  |
| 1112             | Senior Government and Statutory Board Officials                                    | 112              | SENIOR GOVERNMENT AND STATUTORY BOARD OFFICIALS                                    |
| 1114             | Senior Officials of Political Party Organisations                                  | 1120             | Senior Government and Statutory Board Officials                                    |
| 1115             | Senior Officials Of Employers', Workers' and Other Economic-Interest Organisations | 113              | SENIOR OFFICIALS OF SPECIAL-INTEREST ORGANISATIONS                                 |
| 1116             | Senior Officials of Humanitarian and Other Special-Interest Organisations          | 1131             | Senior Officials Of Political Party Organisations                                  |
| 112              | MANAGING DIRECTORS, CHIEF EXECUTIVES AND GENERAL MANAGERS                          | 1132             | Senior Officials Of Employers', Workers' and Other Economic-Interest Organisations |
| 1120             | Managing Directors, Chief Executives and General Managers                          | 1133             | Senior Officials Of Humanitarian and Other Special-Interest Organisations          |
| <b>12</b>        | <b>ADMINISTRATIVE AND COMMERCIAL MANAGERS</b>                                      | <b>12</b>        | <b>CORPORATE MANAGERS</b>  |
| 121              | BUSINESS SERVICES AND ADMINISTRATION MANAGERS                                      | 121              | COMPANY DIRECTORS  |
| 1211             | Finance and Administration Managers  | 1210             | Company Directors  |
| 1212             | Human Resource Managers  | 122              | GENERAL MANAGERS   |
| 1213             | Policy and Planning Managers   | 1220             | General Managers   |
| 1219             | Business Services and Administration Managers Not Elsewhere Classified             |                  |  |

| SSOC 2010 |   | SSOC 2005 |  |
|-----------|---|-----------|--|
| 122       | SALES, MARKETING, DEVELOPMENT AND CUSTOMER SERVICE MANAGERS     | 123       | DEPARTMENT MANAGERS                              |
| 1221      | Sales, Marketing and Business Development Managers              | 1231      | Production, Operations and Distribution Managers |
| 1222      | Advertising and Public Relations Managers                       | 1232      | Sales and Marketing Managers                     |
| 1223      | Research and Development Managers                               | 1233      | Finance and Administration Managers              |
| 1224      | Customer Service and Call Centre Managers                       | 1234      | Personnel and Industrial Relations Managers      |
|           |   | 1235      | Advertising and Public Relations Managers        |
|           |   | 1236      | Research and Development Managers                |
|           |   | 1239      | Department Managers Not Elsewhere Classified     |
| <b>13</b> | <b>PRODUCTION AND SPECIALISED SERVICES MANAGERS</b>             |           |  |
| 131       | PRODUCTION MANAGERS IN AGRICULTURE AND FISHERIES                | 129       | MANAGERS NOT ELSEWHERE CLASSIFIED                |
| 1310      | Production Managers in Agriculture and Fisheries                | 1290      | Managers Not Elsewhere Classified                |
| 132       | MANUFACTURING, MINING, CONSTRUCTION AND DISTRIBUTION MANAGERS   |           |  |
| 1321      | Manufacturing Managers  |           |  |
| 1323      | Construction Managers   |           |  |
| 1324      | Transport, Supply, Distribution and Related Managers            |           |  |
| 1329      | Production and Operations Managers Not Elsewhere Classified     |           |  |
| 133       | INFORMATION AND COMMUNICATIONS TECHNOLOGY SERVICE MANAGERS      |           |  |
| 1330      | Information and Communications Technology Service Managers      |           |  |
| 134       | PROFESSIONAL, FINANCIAL, COMMUNITY AND SOCIAL SERVICES MANAGERS |           |  |
| 1341      | Child Care Services Managers                                    |           |  |
| 1342      | Health Services Managers  |           |  |

| SSOC 2010 |  | SSOC 2005 |   |
|-----------|--|-----------|---|
| 1343      | Aged Care Services Managers  |           |   |
| 1344      | Social Welfare Managers  |           |   |
| 1345      | Education Managers   |           |   |
| 1346      | Financial and Insurance Services Managers  |           |   |
| 1349      | Professional, Financial, Community and Social Services Managers Not Elsewhere Classified |           |   |
| <b>14</b> | <b>HOSPITALITY, RETAIL AND RELATED SERVICES MANAGERS</b>                                 |           |   |
| 141       | HOTEL AND FOOD AND BEVERAGES SERVICES MANAGERS   |           |   |
| 1411      | Hotel Operations and Lodging Services Managers   |           |   |
| 1412      | Food and Beverages Services Managers   |           |   |
| 142       | RETAIL AND WHOLESALE TRADE MANAGERS  |           |   |
| 1420      | Retail and Wholesale Trade Managers  |           |   |
| 143       | OTHER SERVICES MANAGERS  |           |   |
| 1431      | Sports Centre Managers   |           |   |
| 1432      | Recreation Centre Managers   |           |   |
| 1433      | Arts and Cultural Centre Managers  |           |   |
| 1439      | Other Services Managers Not Elsewhere Classified   |           |   |
|           |  | <b>13</b> | <b>WORKING PROPRIETORS</b>                          |
|           |  | 130       | WORKING PROPRIETORS                                 |
|           |  | 1301      | Working Proprietors (Wholesale and Retail Trade)    |
|           |  | 1302      | Working Proprietors (Lodging and Catering Services) |
|           |  | 1309      | Working Proprietors Not Elsewhere Classified        |

**2 PROFESSIONALS**

**PROFESSIONALS**

| <b>SSOC 2010</b> |  | <b>SSOC 2005</b> |   |
|------------------|--|------------------|---|
| <b>21</b>        | <b>SCIENCE AND ENGINEERING PROFESSIONALS</b>                       | <b>21</b>        | <b>PHYSICAL, MATHEMATICAL AND ENGINEERING SCIENCE PROFESSIONALS</b> |
| 211              | PHYSICAL AND EARTH SCIENCE PROFESSIONALS                           | 211              | PHYSICAL SCIENCE PROFESSIONALS                                      |
| 2111             | Physicists and Astronomers   | 2111             | Physicists  |
| 2112             | Meteorologists   | 2112             | Meteorologists  |
| 2113             | Chemists   | 2113             | Chemists  |
| 2114             | Geologists, Geophysicists and Other Physical Science Professionals | 2119             | Physical Science Professionals Not Elsewhere Classified             |
| 212              | MATHEMATICIANS, ACTUARIES AND STATISTICIANS                        | 212              | MATHEMATICIANS, STATISTICIANS AND RELATED PROFESSIONALS             |
| 2121             | Mathematicians, Operations Research Analysts and Actuaries         | 2121             | Mathematicians, Operations Research Analysts and Actuaries          |
| 2122             | Statisticians  | 2122             | Statisticians and Social Research Analysts                          |
| 213              | LIFE SCIENCE PROFESSIONALS   | 213              | INFORMATION TECHNOLOGY PROFESSIONALS                                |
| 2131             | Biologists, Botanists, Zoologists and Related Professionals        | 2131             | Information Technology Managers                                     |
| 2132             | Farming, Forestry and Fisheries Advisers                           | 2132             | Information Technology Designers and Analysts                       |
| 2133             | Environmental Protection and Related Professionals                 | 2133             | Programmers   |
| 2134             | Pharmacologists and Related Professionals                          | 2134             | Network, Systems and Database Administrators                        |
|                  |  | 2139             | Information Technology Professionals Not Elsewhere Classified       |
| 214              | ENGINEERING PROFESSIONALS (EXCLUDING ELECTROTECHNOLOGY)            | 214              | ARCHITECTS, ENGINEERS AND RELATED PROFESSIONALS                     |
| 2141             | Industrial and Production Engineers                                | 2141             | Architects and Town Planners  |
| 2142             | Civil Engineers  | 2142             | Civil Engineers   |
| 2143             | Environmental Engineers  | 2143             | Electrical Engineers  |
| 2144             | Mechanical Engineers   | 2144             | Electronics Engineers   |
| 2145             | Chemical Engineers   | 2145             | Mechanical Engineers  |
| 2146             | Mining Engineers, Metallurgists and Related Professionals          | 2146             | Chemical Engineers  |
| 2149             | Engineering Professionals Not Elsewhere Classified                 |                  |   |

| SSOC 2010 |      |  | SSOC 2005 |      |   |
|-----------|------|--|-----------|------|---|
| 215       |      | ELECTROTECHNOLOGY ENGINEERS                              | 2147      |      | Manufacturing Engineers                                     |
|           | 2151 | Electrical Engineers                                     | 2148      |      | Surveyors   |
|           | 2152 | Electronics Engineers                                    | 2149      |      | Architects, Engineers and Related Professionals             |
|           | 2153 | Telecommunications Engineers                             |           |      | Not Elsewhere Classified                                    |
| 216       |      | ARCHITECTS, PLANNERS AND SURVEYORS                       |           |      |   |
|           | 2161 | Building Architects                                      |           |      |   |
|           | 2162 | Landscape Architects                                     |           |      |   |
|           | 2164 | Town and Related Planners                                |           |      |   |
|           | 2165 | Surveyors and Cartographers                              |           |      |   |
| <b>22</b> |      | <b>HEALTH PROFESSIONALS</b>                              | <b>22</b> |      | <b>LIFE SCIENCE AND HEALTH PROFESSIONALS</b>                |
| 221       |      | MEDICAL DOCTORS  | 221       |      | LIFE SCIENCE PROFESSIONALS                                  |
|           | 2211 | Generalist Medical Practitioners                         |           | 2211 | Biologists, Botanists, Zoologists and Related Professionals |
|           | 2212 | Specialist Medical Practitioners (Medical)               |           | 2212 | Pharmacologists, Pathologists and Related Professionals     |
|           | 2213 | Specialist Medical Practitioners (Surgical)              |           | 2213 | Agronomists and Related Professionals                       |
|           | 2214 | Specialist Medical Practitioners (Other Specialisations) |           |      |   |
| 223       |      | TRADITIONAL AND COMPLEMENTARY MEDICINE PROFESSIONALS     | 222       |      | HEALTH PROFESSIONALS  |
|           | 2230 | Traditional and Complementary Medicine Professionals     |           | 2221 | Medical Doctors   |
|           |      |  |           | 2222 | Dentists  |
|           |      |  |           | 2223 | Veterinarians   |
|           |      |  |           | 2224 | Pharmacists   |
| 225       |      | VETERINARIANS  |           | 2229 | Health Professionals Not Elsewhere Classified               |
|           | 2250 | Veterinarians  |           |      |   |

| SSOC 2010 |      |   | SSOC 2005 |      |   |
|-----------|------|---|-----------|------|---|
| 226       |      | OTHER HEALTH PROFESSIONALS                                      |           |      |   |
|           | 2261 | Dentists  |           |      |   |
|           | 2262 | Pharmacists   |           |      |   |
|           | 2263 | Environmental and Occupational Health and Hygiene Professionals |           |      |   |
|           | 2269 | Other Health Professionals Not Elsewhere Classified             |           |      |   |
| <b>23</b> |      | <b>TEACHING PROFESSIONALS</b>                                   | <b>23</b> |      | <b>TEACHING PROFESSIONALS</b>                               |
| 231       |      | UNIVERSITY, POLYTECHNIC AND HIGHER EDUCATION TEACHERS           | 231       |      | UNIVERSITY, POLYTECHNIC AND OTHER HIGHER EDUCATION TEACHERS |
|           | 2310 | University, Polytechnic and Higher Education Teachers           |           | 2310 | University, Polytechnic and Other Higher Education Teachers |
| 232       |      | VOCATIONAL EDUCATION TEACHERS                                   | 232       |      | UPPER SECONDARY AND SECONDARY EDUCATION TEACHERS            |
|           | 2320 | Vocational Education Teachers                                   |           | 2320 | Upper Secondary and Secondary Education Teachers            |
| 233       |      | SECONDARY EDUCATION TEACHERS                                    | 233       |      | PRIMARY EDUCATION TEACHERS                                  |
|           | 2330 | Secondary Education Teachers                                    |           | 2330 | Primary Education Teachers                                  |
| 234       |      | PRIMARY EDUCATION TEACHERS                                      | 234       |      | SPECIAL EDUCATION TEACHERS                                  |
|           | 2340 | Primary School Teachers   |           | 2340 | Special Education Teachers                                  |
| 235       |      | OTHER TEACHING PROFESSIONALS                                    | 239       |      | TEACHING PROFESSIONALS NOT ELSEWHERE CLASSIFIED             |
|           | 2351 | Education Methods Specialists                                   |           | 2391 | School Principals   |
|           | 2352 | Special Education Teachers                                      |           | 2392 | Education Methods Specialists                               |
|           | 2359 | Other Teaching Professionals Not Elsewhere Classified           |           | 2399 | Other Teaching Professionals Not Elsewhere Classified       |

| SSOC 2010 |  |  | SSOC 2005 |   |   |
|-----------|--|--|-----------|---|---|
| <b>24</b> | <b>BUSINESS AND ADMINISTRATION PROFESSIONALS</b>               |  | <b>24</b> | <b>BUSINESS PROFESSIONALS</b>                                   |   |
| 241       | FINANCE PROFESSIONALS  |  | 241       | ACCOUNTANTS   |   |
|           | 2411   | Accountants  |           | 2410  | Accountants                                     |
|           | 2412   | Financial and Investment Advisers  |           |   |   |
|           | 2413   | Financial Analysts and Related Professionals                               | 242       | FINANCIAL ANALYSTS AND RELATED PROFESSIONALS                    |   |
|           |  |  |           | 2420  | Financial Analysts and Related Professionals    |
| 242       | ADMINISTRATION PROFESSIONALS                                   |  | 249       | BUSINESS PROFESSIONALS NOT ELSEWHERE CLASSIFIED                 |   |
|           | 2421   | Management and Business Consultants  |           | 2490  | Business Professionals Not Elsewhere Classified |
|           | 2422   | Policy Administration Professionals  |           |   |   |
|           | 2423   | Human Resource Professionals   |           |   |   |
| 243       | MARKETING AND PUBLIC RELATIONS PROFESSIONALS                   |  |           |   |   |
|           | 2431   | Advertising and Marketing Professionals                                    |           |   |   |
|           | 2432   | Public Relations Professionals   |           |   |   |
| <b>25</b> | <b>INFORMATION AND COMMUNICATIONS TECHNOLOGY PROFESSIONALS</b> |  |           |   |   |
| 251       | SOFTWARE AND APPLICATIONS DEVELOPERS AND ANALYSTS              |  |           | See sub-major group 21 'SCIENCE AND ENGINEERING PROFESSIONALS'. |   |
|           | 2511   | Systems Analysts   |           |   |   |
|           | 2512   | Software, Web and Multimedia Developers                                    |           |   |   |
|           | 2514   | Applications and Systems Programmers                                       |           |   |   |
|           | 2515   | Information Technology Testing and Quality Assurance Professionals         |           |   |   |
|           | 2516   | Information Technology Project Managers                                    |           |   |   |
|           | 2519   | Software and Applications Developers and Analysts Not Elsewhere Classified |           |   |   |

| SSOC 2010 |      |   | SSOC 2005 |      |   |
|-----------|------|---|-----------|------|---|
| 252       |      | DATABASE AND NETWORK PROFESSIONALS                                      |           |      |   |
|           | 2521 | Database Designers and Administrators                                   |           |      |   |
|           | 2522 | Network and Computer Systems Administrators                             |           |      |   |
|           | 2523 | Computer Network Professionals  |           |      |   |
|           | 2524 | Information Technology Security Specialists                             |           |      |   |
|           | 2529 | Database and Network Professionals Not Elsewhere Classified             |           |      |   |
| <b>26</b> |      | <b>LEGAL, SOCIAL AND CULTURAL PROFESSIONALS</b>                         | <b>25</b> |      | <b>LEGAL PROFESSIONALS</b>  |
| 261       |      | LEGAL PROFESSIONALS   | 250       |      | LEGAL PROFESSIONALS   |
|           | 2611 | Lawyers   |           | 2501 | Lawyers   |
|           | 2612 | Judges  |           | 2502 | Judges  |
|           |      |   | <b>29</b> |      | <b>PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>                                   |
| 262       |      | LIBRARIANS, ARCHIVISTS AND CURATORS                                     | 291       |      | ARCHIVISTS, LIBRARIANS AND RELATED PROFESSIONALS                                |
|           | 2621 | Archivists, Curators and Conservators                                   |           | 2911 | Archivists, Curators and Conservators   |
|           | 2622 | Librarians and Related Information Professionals                        |           | 2912 | Librarians and Related Professionals  |
| 263       |      | SOCIAL SCIENCE PROFESSIONALS  | 292       |      | SOCIAL WORK PROFESSIONALS AND OTHER<br>SOCIAL SCIENCE AND RELATED PROFESSIONALS |
|           | 2631 | Economists  |           | 2921 | Economists  |
|           | 2632 | Sociologists, Anthropologists and Related Professionals                 |           | 2922 | Sociologists and Anthropologists  |
|           | 2633 | Historians, Political Scientists and Other Social Science Professionals |           | 2923 | Social Work Professionals   |
|           | 2634 | Psychologists   |           | 2929 | Other Social Science and Related Professionals Not<br>Elsewhere Classified      |
|           | 2635 | Social Work and Counselling Professionals                               |           |      |   |

| SSOC 2010 |      |   | SSOC 2005 |      |   |
|-----------|------|---|-----------|------|---|
| 264       |      | AUTHORS, JOURNALISTS AND EDITORS                    | 293       |      | WRITERS AND CREATIVE OR PERFORMING ARTISTS              |
|           | 2641 | Authors and Related Writers                         |           | 2930 | Journalists   |
|           | 2642 | Journalists   |           | 2931 | Authors and Other Writers                               |
| 265       |      | CREATIVE AND PERFORMING ARTISTS                     |           | 2932 | Editors (Newspapers And Periodicals)                    |
|           | 2651 | Visual Artists                                      |           | 2933 | Other Editors   |
|           | 2652 | Musicians, Composers and Singers                    |           | 2934 | Sculptors, Painters and Related Artists                 |
|           | 2653 | Dancers and Choreographers                          |           | 2935 | Instrumentalists  |
|           | 2654 | Film, Stage and Related Directors and Producers     |           | 2936 | Music Instructors                                       |
|           | 2655 | Actors  |           | 2937 | Other Musicians, Composers and Singers                  |
|           |      |   |           | 2938 | Choreographers and Dancers                              |
|           |      |   |           | 2939 | Film, Stage And Related Producers, Directors and Actors |
| <b>29</b> |      | <b>OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b> |           |      |   |
| 290       |      | OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED        | 294       |      | RELIGIOUS PROFESSIONALS                                 |
|           | 2901 | Religious Professionals                             |           | 2940 | Religious Professionals                                 |
|           | 2909 | Other Professionals Not Elsewhere Classified        | 299       |      | OTHER PROFESSIONALS NOT ELSEWHERE CLASSIFIED            |
|           |      |   |           | 2990 | Other Professionals Not Elsewhere Classified            |

**3 ASSOCIATE PROFESSIONALS AND TECHNICIANS**

**ASSOCIATE PROFESSIONALS AND TECHNICIANS**

| <b>SSOC 2010</b> |   |  | <b>SSOC 2005</b> |   |  |
|------------------|---|--|------------------|---|--|
| <b>31</b>        | <b>PHYSICAL AND ENGINEERING SCIENCE<br/>ASSOCIATE PROFESSIONALS</b> |  | <b>31</b>        | <b>PHYSICAL AND ENGINEERING SCIENCE<br/>ASSOCIATE PROFESSIONALS</b> |  |
| 310              | 3100  | ASSISTANT ENGINEERS<br>Assistant Engineers                               | 310              | 3100  | ASSISTANT ENGINEERS<br>Assistant Engineers                             |
| 311              |   | PHYSICAL AND ENGINEERING SCIENCE TECHNICIANS                             | 311              |   | CHEMICAL AND PHYSICAL SCIENCE TECHNICIANS                              |
|                  | 3111  | Chemical and Physical Science Technicians                                |                  | 3110  | Chemical and Physical Science Technicians                              |
|                  | 3112  | Civil Engineering Technicians  |                  |   |  |
|                  | 3113  | Electrical Engineering Technicians                                       | 312              |   | BUILDING AND ENGINEERING TECHNICIANS                                   |
|                  | 3114  | Electronics Engineering Technicians                                      |                  | 3121  | Civil Engineering and Related Technicians                              |
|                  | 3115  | Mechanical Engineering Technicians                                       |                  | 3122  | Electrical Engineering Technicians                                     |
|                  | 3116  | Chemical Engineering Technicians   |                  | 3123  | Electronics Engineering Technicians                                    |
|                  | 3117  | Manufacturing Engineering Technicians                                    |                  | 3124  | Mechanical Engineering Technicians                                     |
|                  | 3118  | Draughtsmen  |                  | 3125  | Chemical Engineering Technicians                                       |
|                  | 3119  | Physical and Engineering Science Technicians Not Elsewhere<br>Classified |                  | 3126  | Manufacturing Engineering Technicians                                  |
|                  |   |  |                  | 3127  | Draughtsmen  |
|                  |   |  |                  | 3129  | Building and Engineering Technicians Not Elsewhere Classified          |
| 314              |   | LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE<br>PROFESSIONALS          | 313              |   | COMPUTER SYSTEMS OPERATORS   |
|                  | 3141  | Life Science Technicians (Except Medical)                                |                  | 3130  | Computer Systems Operators   |
|                  | 3142  | Agronomy, Horticultural and Farming Technicians                          | 314              |   | OPTICAL AND ELECTRONIC EQUIPMENT OPERATORS                             |
|                  |   |  |                  | 3141  | Photographers and Image And Sound<br>Recording Equipment Operators     |
|                  |   |  |                  | 3142  | Telecommunications Equipment Operators                                 |
|                  |   |  |                  | 3149  | Optical And Electronic Equipment Operators Not Elsewhere<br>Classified |

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|-----------|------|--|-----------|------|---|
| 315       |      | SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS                      | 315       |      | TRANSPORT CONTROLLERS, TECHNICIANS AND SUPERVISORS                          |
|           | 3151 | Ships' Engineers   |           | 3151 | Ships' Engineers  |
|           | 3152 | Ships' Deck Officers and Pilots                                    |           | 3152 | Ships' Deck Officers and Pilots   |
|           | 3153 | Aircraft Pilots and Related Associate Professionals                |           | 3153 | Aircraft Pilots and Related Associate Professionals                         |
|           | 3154 | Air Traffic Controllers  |           | 3154 | Air Traffic Controllers   |
|           | 3156 | Sea Traffic Controllers  |           | 3155 | Sea Traffic Controllers   |
|           | 3157 | Transport Operations Supervisors                                   |           | 3156 | Transport Operations Supervisors  |
|           | 3159 | Transport Controllers and Related Workers Not Elsewhere Classified |           | 3159 | Transport Controllers and Technicians Not Elsewhere Classified              |
| 316       |      | PREMISES AND PARKS OFFICERS  |           |      |   |
|           | 3160 | Premises and Parks Officers  |           |      |   |
| 317       |      | BUILDING, QUALITY AND SAFETY INSPECTORS                            | 316       |      | BUILDING, SAFETY AND HEALTH INSPECTORS                                      |
|           | 3171 | Building and Fire Inspectors                                       |           | 3161 | Building and Fire Inspectors  |
|           | 3172 | Quality and Safety Inspectors                                      |           | 3162 | Environment Health and Safety Inspectors (Vehicles, Processes and Products) |
| <b>32</b> |      | <b>HEALTH ASSOCIATE PROFESSIONALS</b>                              | <b>32</b> |      | <b>LIFE SCIENCE AND HEALTH ASSOCIATE PROFESSIONALS</b>                      |
| 321       |      | MEDICAL AND PHARMACEUTICAL TECHNICIANS                             | 321       |      | LIFE SCIENCE TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS                |
|           | 3211 | Medical Imaging and Therapeutic Equipment Technicians              |           | 3211 | Life Science Technicians  |
|           | 3212 | Medical and Pathology Laboratory Technicians                       |           | 3212 | Agronomy and Related Technicians  |
|           | 3213 | Pharmaceutical Technicians   |           | 3213 | Farming and Related Technicians   |
|           | 3214 | Medical and Dental Prosthetic Technicians                          |           |      |   |

| SSOC 2010 |      |  | SSOC 2005 |      |   |
|-----------|------|--|-----------|------|---|
| 322       | 3220 | NURSING ASSOCIATE PROFESSIONALS<br>Nursing Associate Professionals   | 322/323   | 3221 | HEALTH ASSOCIATE PROFESSIONALS<br>Optometrists and Opticians  |
| 323       | 3230 | TRADITIONAL AND COMPLEMENTARY MEDICINE<br>ASSOCIATE PROFESSIONALS<br>Traditional and Complementary Medicine Associate<br>Professionals |           | 3222 | Physiotherapists  |
|           |      |  |           | 3223 | Occupational Therapists                                       |
|           |      |  |           | 3224 | Other Physical Therapists and Related Associate Professionals |
|           |      |  |           | 3225 | Dieticians and Public Health Nutritionists                    |
|           |      |  |           | 3226 | Nurses and Midwives   |
|           |      |  |           | 3227 | Dental Nurses   |
| 324       | 3240 | VETERINARY TECHNICIANS AND ASSISTANTS<br>Veterinary Technicians and Assistants   |           | 3228 | Veterinary Assistants   |
|           |      |  |           | 3230 | Medical Imaging and Related Associate Professionals           |
|           |      |  |           | 3231 | Health Associate Professionals Not Elsewhere Classified       |
| 325       | 3251 | OTHER HEALTH ASSOCIATE PROFESSIONALS<br>Dental Nurses and Therapists   |           |      |   |
|           | 3252 | Dietitians and Nutritionists   |           |      |   |
|           | 3253 | Audiologists and Speech Therapists   |           |      |   |
|           | 3254 | Optometrists and Opticians   |           |      |   |
|           | 3255 | Physiotherapists and Related Associate Professionals   |           |      |   |
|           | 3256 | Occupational Therapists  |           |      |   |
|           | 3257 | Environmental and Occupational Health Inspectors   |           |      |   |
|           | 3259 | Health Associate Professionals Not Elsewhere Classified  |           |      |   |

| SSOC 2010 |   | SSOC 2005 |  |
|-----------|---|-----------|--|
| <b>33</b> | <b>BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS</b>                  | <b>34</b> | <b>FINANCE, SALES AND RELATED BUSINESS ASSOCIATE PROFESSIONALS</b> |
| 331       | FINANCIAL AND MATHEMATICAL ASSOCIATE PROFESSIONALS                          | 341/342   | FINANCE AND SALES ASSOCIATE PROFESSIONALS                          |
| 3311      | Securities and Finance Dealers and Brokers                                  | 3411      | Assistant Accountants  |
| 3312      | Credit and Loans Officers   | 3412      | Securities Dealers and Brokers                                     |
| 3313      | Accounting Associate Professionals  | 3413      | Foreign Exchange Dealers and Brokers                               |
| 3314      | Statistical, Mathematical and Actuarial Associate Professionals             | 3414      | Financial Futures Dealers and Brokers                              |
| 3315      | Valuers and Loss Assessors  | 3415      | Commodities Futures Brokers  |
|           |   | 3416      | Other Finance Dealers and Brokers                                  |
|           |   | 3417      | Insurance Sales Agents and Brokers                                 |
| 332       | SALES AND RELATED ASSOCIATE PROFESSIONALS                                   | 3418      | Insurance Underwriters   |
| 3321      | Insurance Representatives   | 3419      | Other Insurance Representatives                                    |
| 3322      | Commercial and Marketing Sales Representatives                              | 3420      | Real Estate Agents   |
| 3323      | Buyers and Purchasing Agents  | 3421      | Technical and Commercial Sales Representatives                     |
| 3324      | Trade and Ship Brokers  | 3422      | Buyers and Purchasing Agents                                       |
| 3329      | Sales and Related Associate Professionals Not Elsewhere Classified          | 3423      | Valuers and Auctioneers  |
|           |   | 3424      | Finance and Sales Associate Professionals Not Elsewhere Classified |
| 333       | BUSINESS SERVICES AGENTS  | 343       | BUSINESS SERVICE AGENTS AND TRADE BROKERS                          |
| 3331      | Shipping, Clearing and Forwarding Agents                                    | 3430      | Business Service Agents and Trade Brokers                          |
| 3332      | Conference and Event Planners   |           |  |
| 3333      | Employment Agents and Labour Contractors                                    |           |  |
| 3334      | Real Estate Agents  |           |  |
| 3339      | Business Services Agents Not Elsewhere Classified                           |           |  |
| 334       | ADMINISTRATIVE ASSOCIATE PROFESSIONALS                                      | <b>39</b> | <b>ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED</b>            |
| 3345      | Public Relations Associate Professionals                                    | 391       | GOVERNMENT ASSOCIATE PROFESSIONALS                                 |
| 3346      | Human Resource Associate Professionals                                      | 3911      | Police Inspectors and Customs and Related Officers                 |
| 3349      | Administrative and Related Associate Professionals Not Elsewhere Classified | 3919      | Other Government Associate Professionals Not Elsewhere Classified  |

| SSOC 2010 |      |  | SSOC 2005 |      |   |
|-----------|------|--|-----------|------|---|
| 335       |      | GOVERNMENT ASSOCIATE PROFESSIONALS   | 392       |      | STATISTICAL, ADMINISTRATIVE AND RELATED ASSOCIATE PROFESSIONALS     |
|           | 3351 | Customs and Immigration Officers   |           | 3921 | Statistical, Mathematical and Related Associate Professionals       |
|           | 3355 | Police Inspectors  |           | 3922 | Administrative and Related Associate Professionals                  |
|           | 3359 | Government Associate Professionals Not Elsewhere Classified                      |           |      |   |
| <b>34</b> |      | <b>LEGAL, SOCIAL, CULTURAL AND RELATED ASSOCIATE PROFESSIONALS</b>               |           |      |   |
| 341       |      | LEGAL AND SOCIAL ASSOCIATE PROFESSIONALS   | 393       |      | SOCIAL WORK ASSOCIATE PROFESSIONALS                                 |
|           | 3411 | Legal Associate Professionals  |           | 3930 | Social Work Associate Professionals                                 |
|           | 3412 | Social Work Associate Professionals  |           |      |   |
| 342       |      | SPORTS AND FITNESS WORKERS   | 394       |      | TRANSLATORS AND INTERPRETERS  |
|           | 3421 | Athletes and Sportsmen   |           | 3940 | Translators   |
|           | 3422 | Sports Coaches, Instructors, Officials and Other Related Associate Professionals |           | 3941 | Interpreters  |
| 343       |      | ARTISTIC AND CULTURAL ASSOCIATE PROFESSIONALS                                    | 395       |      | ARTISTIC, ENTERTAINMENT AND SPORTS ASSOCIATE PROFESSIONALS          |
|           | 3431 | Photographers  |           | 3950 | Radio and Television Presenters and Related Associate Professionals |
|           | 3432 | Interior Designers and Decorators  |           | 3951 | Interior Designers  |
|           | 3433 | Gallery, Museum and Library Technicians  |           | 3952 | Fashion and Garment Designers                                       |
|           | 3435 | Fashion, Garment and Product Designers   |           | 3953 | Other Decorators and Commercial Designers                           |
|           | 3436 | Graphic and Multimedia Designers and Artists                                     |           | 3954 | Clowns, Magicians, Acrobats and Related Associate Professionals     |
|           | 3439 | Artistic and Cultural Associate Professionals Not Elsewhere Classified           |           | 3955 | Professional Sportsmen  |
|           |      |  |           | 3956 | Sports Coaches  |

| SSOC 2010 |   |  | SSOC 2005 |  |
|-----------|---|--|-----------|--|
| 344       |   | PERFORMING ASSOCIATE PROFESSIONALS   | 3957      | Physical Fitness Instructors   |
|           | 3441  | Radio and Television Presenters and Related Associate Professionals        | 3958      | Other Athletes and Related Associate Professionals                                 |
|           | 3442  | Clowns, Magicians, Acrobats and Related Associate Professionals            | 3959      | Animal/Bird Keepers and Trainers   |
|           |   |  | 396       | NON-ORDAINED RELIGIOUS ASSOCIATE PROFESSIONALS                                     |
|           |   |  | 3960      | Non-Ordained Religious Associate Professionals                                     |
|           |   |  | 399       | OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE CLASSIFIED                             |
|           |   |  | 3990      | Other Associate Professionals Not Elsewhere Classified                             |
| <b>35</b> | <b>INFORMATION AND COMMUNICATIONS TECHNICIANS</b> |  |           |  |
| 351       |   | INFORMATION AND COMMUNICATIONS TECHNOLOGY OPERATORS AND TECHNICIANS        |           | See sub-major group 31 'PHYSICAL AND ENGINEERING SCIENCE ASSOCIATE PROFESSIONALS'. |
|           | 3511  | Computer Systems Operators   |           |  |
|           | 3512  | Computer Technicians   |           |  |
|           | 3514  | Website Administrators   |           |  |
| 352       |   | TELECOMMUNICATIONS AND BROADCASTING TECHNICIANS AND AUDIO-VISUAL OPERATORS |           |  |
|           | 3521  | Broadcasting Technicians and Audio-Visual Operators                        |           |  |
|           | 3522  | Telecommunications Engineering Technicians                                 |           |  |
|           | 3523  | Telecommunications Equipment Operators                                     |           |  |
|           | 3529  | Optical and Electronic Equipment Operators Not Elsewhere Classified        |           |  |

| SSOC 2010 |   |  | SSOC 2005 |   |  |
|-----------|---|--|-----------|---|--|
| <b>36</b> | <b>TEACHING ASSOCIATE PROFESSIONALS</b>                           |  | <b>33</b> | <b>TEACHING ASSOCIATE PROFESSIONALS</b>                                       |  |
| 361       | 3610  | PRE-PRIMARY EDUCATION TEACHERS<br>Pre-Primary Education Teachers | 331       | 3311  | PRE-PRIMARY EDUCATION TEACHERS<br>Pre-Primary Education Teachers |
| 362       | 3620  | EXTRACURRICULUM INSTRUCTORS<br>Extracurriculum Instructors       | 332       | 3320  | EXTRACURRICULUM TEACHERS<br>Extracurriculum Teachers             |
| 369       |   | TEACHING ASSOCIATE PROFESSIONALS NOT<br>ELSEWHERE CLASSIFIED     | 339       |   | TEACHING ASSOCIATE PROFESSIONALS NOT<br>ELSEWHERE CLASSIFIED     |
|           | 3691  | Private Tutors   |           | 3391  | Private Tutors   |
|           | 3699  | Teaching Associate Professionals Not Elsewhere Classified        |           | 3399  | Teaching Associate Professionals Not Elsewhere Classified        |
| <b>39</b> | <b>OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE<br/>CLASSIFIED</b> |  |           |   |  |
| 391       | 3910  | TRANSLATORS AND INTERPRETERS<br>Translators and Interpreters     |           | See sub-major group 39 'ASSOCIATE PROFESSIONALS<br>NOT ELSEWHERE CLASSIFIED'. |  |
| 399       |   | OTHER ASSOCIATE PROFESSIONALS NOT ELSEWHERE<br>CLASSIFIED        |           |   |  |
|           | 3991  | Religious Associate Professionals                                |           |   |  |
|           | 3999  | Other Associate Professionals Not Elsewhere Classified           |           |   |  |

**4 CLERICAL SUPPORT WORKERS**

**CLERICAL WORKERS**

| <b>SSOC 2010</b> |      |  | <b>SSOC 2005</b> |      |  |
|------------------|------|--|------------------|------|--|
| <b>40</b>        |      | <b>CLERICAL SUPERVISORS</b>  |                  |      |  |
| 400              | 4000 | CLERICAL SUPERVISORS<br>Clerical Supervisors                             |                  |      |  |
| <b>41</b>        |      | <b>GENERAL AND KEYBOARD CLERKS</b>                                       | <b>41</b>        |      | <b>OFFICE CLERKS</b>                       |
| 411              | 4110 | GENERAL OFFICE CLERKS<br>General Office Clerks                           | 411              |      | SECRETARIES AND KEYBOARD OPERATING CLERKS  |
|                  |      |  |                  | 4111 | Secretaries and Verbatim Reporters         |
|                  |      |  |                  | 4112 | Word Processor and Related Operators       |
| 412              | 4120 | SECRETARIES AND VERBATIM REPORTERS<br>Secretaries and Verbatim Reporters |                  | 4113 | Data Entry Operators                       |
| 413              |      | KEYBOARD OPERATORS   | 412              |      | ADMINISTRATIVE CLERKS                      |
|                  | 4131 | Typists and Word Processing Operators                                    |                  | 4120 | Administrative Clerks                      |
|                  | 4132 | Data Entry Clerks  | 413              |      | ACCOUNTING AND FINANCE CLERKS              |
|                  |      |  |                  | 4130 | Accounting and Finance Clerks              |
|                  |      |  | 414              |      | STATISTICAL AND COMPUTER OPERATIONS CLERKS |
|                  |      |  |                  | 4141 | Statistical Clerks                         |
|                  |      |  |                  | 4142 | Computer Operations Clerks                 |
|                  |      |  | 415              |      | MATERIAL-RECORDING CLERKS                  |
|                  |      |  |                  | 4151 | Stock Clerks                               |
|                  |      |  |                  | 4152 | Production Clerks                          |

| SSOC 2010 |  |  | SSOC 2005 |  |  |
|-----------|--|--|-----------|--|--|
| <b>42</b> | <b>CUSTOMER SERVICES CLERKS</b>                |  | <b>42</b> | <b>CUSTOMER SERVICE CLERKS</b>                   |  |
| 421       | TELLERS, MONEY COLLECTORS AND RELATED CLERKS   |  | 421       | CASHIERS, TELLERS AND RELATED CLERKS             |  |
|           | 4211   | Bank Tellers and Other Counter Clerks              |           | 4211   | Cashiers and Ticket Clerks                           |
|           | 4213   | Pawnbrokers and Moneylenders                       |           | 4212   | Tellers and Other Counter Clerks                     |
|           | 4214   | Bill collectors and Related Workers                |           | 4213   | Pawnbrokers and Moneylenders                         |
|           |  |  |           | 4219   | Cashiers and Related Clerks Not Elsewhere Classified |
| 422       | CLIENT INFORMATION CLERKS                      |  | 422       | CLIENT INFORMATION CLERKS                        |  |
|           | 4221   | Travel Agency and Related Clerks                   |           | 4221   | Travel Agency and Related Clerks                     |
|           | 4223   | Telephone Operators                                |           | 4222   | Receptionists and Information Clerks                 |
|           | 4224   | Receptionists and Information Clerks               |           | 4223   | Telephone Operators                                  |
|           | 4229   | Client Information Clerks Not Elsewhere Classified |           | 4229   | Client Information Clerks Not Elsewhere Classified   |
| <b>43</b> | <b>NUMERICAL AND MATERIAL-RECORDING CLERKS</b> |  |           |  |  |
| 431       | NUMERICAL CLERKS                               |  |           | See sub-major group 41 'OFFICE CLERKS'.          |  |
|           | 4311   | Accounting and Bookkeeping Clerks                  |           |  |  |
|           | 4312   | Finance and Insurance Clerks                       |           |  |  |
|           | 4314   | Statistical Clerks                                 |           |  |  |
|           | 4315   | Computer Operations Clerks                         |           |  |  |
| 432       | MATERIAL-RECORDING AND TRANSPORT CLERKS        |  |           |  |  |
|           | 4321   | Stock Clerks                                       |           |  |  |
|           | 4322   | Production Clerks                                  |           |  |  |
|           | 4323   | Transport Clerks                                   |           |  |  |
| <b>44</b> | <b>OTHER CLERICAL SUPPORT WORKERS</b>          |  | <b>49</b> | <b>CLERICAL WORKERS NOT ELSEWHERE CLASSIFIED</b> |  |
| 441       | OTHER CLERICAL SUPPORT WORKERS                 |  | 490       | CLERICAL WORKERS NOT ELSEWHERE CLASSIFIED        |  |
|           | 4411   | Library Clerks                                     |           | 4900   | Clerical Workers Not Elsewhere Classified            |
|           | 4417   | Legal Clerks                                       |           |  |  |
|           | 4419   | Clerical Support Workers Not Elsewhere Classified  |           |  |  |

**5 SERVICE AND SALES WORKERS**

**SERVICE WORKERS AND SHOP AND MARKET SALES WORKERS**

| <b>SSOC 2010</b> |   | <b>SSOC 2005</b> |  |
|------------------|---|------------------|--|
| <b>51</b>        | <b>PERSONAL SERVICE WORKERS</b>                   | <b>51</b>        | <b>SERVICE WORKERS</b>   |
| 511              | TRAVEL ATTENDANTS, CONDUCTORS AND GUIDES          | 511              | TRAVEL AND TRANSPORT SERVICE INSPECTORS AND WORKERS                  |
| 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             | Tourist and Other Guides                          | 5113             | Tourist Guides   |
| 512              | CHEFS AND COOKS                                   | 5119             | Other Travel Guides  |
| 5120             | Chefs and Cooks                                   | 512              | HOUSEKEEPING AND CATERING SERVICE WORKERS                            |
| 513              | WAITERS AND BARTENDERS                            | 5121             | Housekeepers   |
| 5131             | Waiters   | 5122             | Cooks  |
| 5132             | Bartenders  | 5123             | Waiters  |
| 5133             | Bar/Lounge Hostesses                              | 5124             | Bartenders   |
| 5139             | Waiters and Bartenders Not Elsewhere Classified   | 5125             | Bar/Lounge Hostesses   |
| 514              | HAIRDRESSERS, BEAUTICIANS AND RELATED WORKERS     | 5129             | Other Waiters and Bartenders   |
| 5141             | Hairdressers, Barbers and Other Related Workers   | 513              | PERSONAL CARE AND HOUSEHOLD SERVICE WORKERS                          |
| 5142             | Beauticians and Related Workers                   | 5131             | Hair Stylists/Hairdressers   |
| 5149             | Wellness Related Workers Not Elsewhere Classified | 5132             | Barbers  |
| 515              | HOUSEKEEPERS AND RELATED WORKERS                  | 5133             | Beauticians  |
| 5150             | Housekeepers and Related Workers                  | 5134             | Manicurists and Related Workers                                      |
|                  |   | 5135             | Undertakers and Embalmers  |
|                  |   | 5136             | Child-Care Workers   |
|                  |   | 5139             | Personal Care and Household Service Workers Not Elsewhere Classified |

| SSOC 2010  |      |   | SSOC 2005 |      |  |
|------------|------|---|-----------|------|--|
| 516        | 5160 | MAIL CARRIERS AND SORTING WORKERS<br>Mail Carriers and Sorting Workers                                | 514       | 5141 | PROTECTIVE SERVICE AND RELATED WORKERS<br>Fire Fighters                              |
| 517        | 5170 | BOOKMAKERS, CROUPIERS AND RELATED GAMING WORKERS<br>Bookmakers, Croupiers and Related Gaming workers  |           | 5142 | Policemen  |
| 519        | 5191 | PERSONAL SERVICE WORKERS NOT ELSEWHERE CLASSIFIED<br>Astrologers, Fortune-tellers and Related Workers |           | 5143 | Prison Guards  |
|            | 5193 | Undertakers and Embalmers   |           | 5144 | Private Security Guards  |
|            | 5194 | Pet Groomers, Animal Keepers and Trainers   |           | 5145 | Life Guards  |
|            | 5195 | Driving Instructors   |           | 5149 | Protective Service and Related Workers Not Elsewhere Classified                      |
|            | 5199 | Personal Service Workers Not Elsewhere Classified   | 515       | 5150 | MAIL DISTRIBUTION WORKERS<br>Mail Distribution Workers                               |
| <b>52</b>  |      | <b>SALES WORKERS</b>  | 519       | 5190 | SERVICE WORKERS NOT ELSEWHERE CLASSIFIED<br>Service Workers Not Elsewhere Classified |
| <b>521</b> |      | <b>STALL SALES WORKERS</b>  | <b>52</b> |      | <b>SHOP AND MARKET SALES WORKERS</b>   |
|            | 5211 | Hawker/Stall Holders (Excluding Prepared Food Or Drinks)  | 521       | 5210 | SHOP SALES AND RELATED WORKERS<br>Shop Sales and Related Workers                     |
|            | 5212 | Hawker/Stall Holders (Prepared Food Or Drinks)  |           |      |  |
|            | 5213 | Newsvendors   | 522       | 5221 | STALL SALES WORKERS<br>Hawker/Stall Holders (Prepared Food or Drinks)                |
|            | 5219 | Other Stall Sales Workers   |           | 5222 | Hawker/Stall Holders (Other Than Prepared Food or Drinks)                            |
| 522        | 5220 | SHOP SALESPERSONS<br>Shop and Store Salespersons  |           | 5223 | Newsvendors  |
| 523        | 5230 | CASHIERS AND TICKET CLERKS<br>Cashiers and Ticket Clerks  |           | 5229 | Other Stall Sales Workers  |

| SSOC 2010 |      |  | SSOC 2005 |      |   |
|-----------|------|--|-----------|------|---|
| 524       |      | MODELS, SALES DEMONSTRATORS AND OTHER SALES WORKERS              | 523       |      | FASHION AND OTHER MODELS                  |
|           | 5241 | Fashion and Other Models   |           | 5230 | Fashion and Other Models                  |
|           | 5242 | Sales Demonstrators and Door-to-Door Salespersons                |           |      |   |
|           | 5244 | Contact Centre Salespersons                                      |           |      |   |
|           | 5249 | Sales Workers Not Elsewhere Classified                           |           |      |   |
| <b>53</b> |      | <b>PERSONAL CARE WORKERS</b>                                     |           |      |   |
| 531       |      | CHILD CARE WORKERS AND TEACHERS' AIDES                           |           |      | See sub-major group 51 'SERVICE WORKERS'. |
|           | 5311 | Child Care and Related Workers                                   |           |      |   |
|           | 5312 | Teachers' Aides  |           |      |   |
| 532       |      | HEALTHCARE ASSISTANTS AND OTHER PERSONAL CARE WORKERS            |           |      |   |
|           | 5320 | Healthcare Assistants and Other Personal Care workers            |           |      |   |
| <b>54</b> |      | <b>PROTECTIVE SERVICES WORKERS</b>                               |           |      |   |
| 541       |      | PROTECTIVE SERVICES WORKERS                                      |           |      | See sub-major group 51 'SERVICE WORKERS'. |
|           | 5411 | Fire-Fighting and Rescue Officers                                |           |      |   |
|           | 5412 | Police Officers  |           |      |   |
|           | 5413 | Prison Officers  |           |      |   |
|           | 5414 | Security Guards  |           |      |   |
|           | 5415 | Lifeguards   |           |      |   |
|           | 5419 | Protective Services and Related Workers Not Elsewhere Classified |           |      |   |
| <b>59</b> |      | <b>SERVICE WORKERS NOT ELSEWHERE CLASSIFIED</b>                  |           |      |   |
| 590       |      | SERVICE WORKERS NOT ELSEWHERE CLASSIFIED                         |           |      |   |
|           | 5900 | Service Workers Not Elsewhere Classified                         |           |      |   |

**6 AGRICULTURAL AND FISHERY WORKERS**

**AGRICULTURAL AND FISHERY WORKERS**

| <b>SSOC 2010</b> |  |   | <b>SSOC 2005</b> |                             |   |
|------------------|--|---|------------------|-----------------------------|---|
| <b>61</b>        | <b>AGRICULTURAL WORKERS</b>                  |   | <b>61</b>        | <b>AGRICULTURAL WORKERS</b> |   |
| 611              | MARKET GARDENERS AND CROP GROWERS            |   | 610              | AGRICULTURAL WORKERS        |   |
|                  | 6111   | Vegetable Farm Workers                            |                  | 6101                        | Vegetable Farm Workers                        |
|                  | 6113   | Gardeners, Horticultural and Nursery Farm Workers |                  | 6102                        | Horticultural and Nursery Farm Workers        |
| 612              | ANIMAL PRODUCERS                             |   |                  | 6103                        | Livestock and Dairy Farm Workers              |
|                  | 6121   | Livestock and Dairy Farm Workers                  |                  | 6104                        | Poultry Farm Workers                          |
|                  | 6122   | Poultry Farm Workers                              |                  | 6109                        | Agricultural Workers Not Elsewhere Classified |
| 619              | AGRICULTURALWORKERS 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                              |   | 620              | FISHERY WORKERS             |   |
|                  | 6221   | Aquaculture Workers                               |                  | 6201                        | Aquatic Life Cultivation Workers              |
|                  | 6222   | Coastal Waters and Deep Sea Fishery Workers       |                  | 6202                        | Coastal Waters and Deep Sea Fishery Workers   |

**7 CRAFTSMEN AND RELATED TRADES WORKERS**

**PRODUCTION CRAFTSMEN AND RELATED WORKERS**

| <b>SSOC 2010</b> |  | <b>SSOC 2005</b> |  |
|------------------|--|------------------|--|
| <b>71</b>        | <b>BUILDING AND RELATED TRADES WORKERS, EXCLUDING ELECTRICIANS</b>     | <b>71</b>        | <b>BUILDING TRADES WORKERS</b>                           |
| 710              | SUPERVISORS AND GENERAL FOREMEN (BUILDING AND RELATED TRADES)          | 710              | SUPERVISORS AND GENERAL FOREMEN (BUILDING TRADES)        |
| 7100             | Supervisors and General Foremen (Building and Related Trades)          | 7100             | Supervisors and General Foremen (Building Trades)        |
| 711              | BUILDING FRAME AND RELATED TRADES WORKERS                              | 711/712          | BUILDING TRADES WORKERS                                  |
| 7112             | Bricklayers and Related Workers  | 7111             | Bricklayers, Stonemasons and Tile Setters                |
| 7113             | Stone Cutters, Splitters, Carvers and Stonemasons                      | 7112             | Concrete Placers, Concrete Finishers and Related Workers |
| 7114             | Concrete Placers, Concrete Finishers and Related Workers               | 7113             | Roofers  |
| 7115             | Carpenters and Joiners   | 7114             | Carpenters and Joiners                                   |
| 7119             | Building Frame and Related Trades Workers Not Elsewhere Classified     | 7115             | Plasterers   |
|                  |  | 7116             | Insulation Workers                                       |
|                  |  | 7117             | Glaziers   |
| 712              | BUILDING FINISHERS AND RELATED TRADES WORKERS                          | 7118             | Building Painters  |
| 7121             | Roofers  | 7119             | Painters (Except Building) and Related Workers           |
| 7122             | Floor Layers and Tile Setters  | 7120             | Housebuilders (General)                                  |
| 7123             | Plasterers   | 7129             | Building Trades Workers Not Elsewhere Classified         |
| 7124             | Insulation Workers   |                  |  |
| 7125             | Glaziers   |                  |  |
| 7126             | Plumbers, Pipe Fitters and Related Workers                             |                  |  |
| 7127             | Air-Conditioning and Refrigeration Mechanics                           |                  |  |
| 7129             | Building Finishers and Related Trades Workers Not Elsewhere Classified |                  |  |

| SSOC 2010 |   | SSOC 2005 |   |
|-----------|---|-----------|---|
| 713       | PAINTERS, BUILDING STRUCTURE CLEANERS AND RELATED WORKERS                           |           |   |
| 7131      | Building Painters and Related Workers   |           |   |
| 7132      | Spray Painters, Varnishers and Other Painters                                       |           |   |
| 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 Foremen (Metal, Machinery and Related Trades)   |
| 721       | SHEET AND STRUCTURAL METAL WORKERS, MOULDERS AND WELDERS AND RELATED TRADES WORKERS | 721       | METAL MOULDERS, PLUMBERS, WELDERS, SHEET METAL WORKERS, STRUCTURAL METAL PREPARERS AND RELATED TRADES WORKERS |
| 7211      | Metal Moulders and Coremakers   | 7211      | Metal Moulders and Coremakers   |
| 7212      | Welders and Flame Cutters   | 7212      | Plumbers and Pipe Fitters   |
| 7213      | Sheet Metal Workers   | 7213      | Welders and Flame Cutters   |
| 7214      | Structural Metal Preparers and Erectors   | 7214      | Sheet Metal Workers   |
| 7215      | Riggers and Cable Splicers  | 7215      | Structural Metal Preparers and Erectors   |
|           |   | 7216      | Riggers and Cable Splicers  |

| SSOC 2010 |  | SSOC 2005 |  |
|-----------|--|-----------|--|
| 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                                  | 7223      | Metal Grinders, Polishers and Tool Sharpeners  |
| 723       | MACHINERY MECHANICS, FITTERS AND REPAIRERS   | 723       | MACHINERY MECHANICS AND FITTERS  |
| 7231      | Motor Vehicle Mechanics and Repairers  | 7231      | Motor Vehicle Mechanics  |
| 7232      | Aircraft Engine Mechanics and Repairers  | 7232      | Other Machinery Mechanics  |
| 7233      | Other Machinery Mechanics and Repairers  | 7233      | Machinery Fitters  |
|           |  | 724       | ELECTRICAL AND ELECTRONIC INSTRUMENT MECHANICS AND FITTERS                           |
|           |  | 7241      | Electricians   |
|           |  | 7242      | Electrical Fitters and Mechanics   |
|           |  | 7243      | Electronics Fitters  |
|           |  | 7244      | Audio and Video Equipment Mechanics  |
|           |  | 7245      | Computer and Related Electronic Equipment Mechanics                                  |
|           |  | 7246      | Telecommunications Installers and Servicers  |
|           |  | 7247      | Electrical Line Installers   |
| <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 2010 |      |  | SSOC 2005 |      |   |
|-----------|------|--|-----------|------|---|
| 731       |      | HANDICRAFT AND PRECISION WORKERS                                   | 731       |      | PRECISION WORKERS IN METAL AND RELATED MATERIALS                      |
|           | 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  |           |      |   |
|           | 7315 | Glass Makers, Cutters, Grinders and Finishers                      |           |      |   |
|           | 7316 | Sign Writers, Decorative Painters, Engravers and Etchers           |           |      |   |
| 732       |      | PRINTING TRADES WORKERS  | 732       |      | POTTERS, GLASS MAKERS AND RELATED TRADES WORKERS                      |
|           | 7321 | Pre-Press Trades Workers   |           | 7321 | Potters and Related Workers   |
|           | 7322 | Printers   |           | 7322 | Glass Makers, Cutters, Grinders and Finishers                         |
|           |      |  |           | 7323 | Glass Engravers and Related Decorative Painters                       |
|           |      |  |           |      |   |
|           |      |  | 733       |      | PRINTING AND RELATED TRADES WORKERS                                   |
|           |      |  |           | 7331 | Compositors and Typesetters   |
|           |      |  |           | 7332 | Stereotypers and Electrotypers  |
|           |      |  |           | 7333 | Printing Engravers and Etchers  |
|           |      |  |           | 7334 | Silk Screen, Block and Textile Printers                               |
| <b>74</b> |      | <b>ELECTRICAL AND ELECTRONIC TRADES WORKERS</b>                    |           |      |   |
| 740       |      | SUPERVISORS AND GENERAL FOREMAN (ELECTRICAL AND ELECTRONIC TRADES) |           |      | See sub-major group 72 'METAL, MACHINERY AND RELATED TRADES WORKERS'. |
|           | 7400 | Supervisors and General Foreman (Electrical and Electronic Trades) |           |      |   |

| SSOC 2010 |      |   | SSOC 2005 |      |   |
|-----------|------|---|-----------|------|---|
| 741       |      | ELECTRICAL EQUIPMENT RELATED TRADES WORKERS   |           |      |   |
|           | 7411 | Electricians  |           |      |   |
|           | 7412 | Electrical Mechanics and Fitters  |           |      |   |
|           | 7413 | Electrical Line Installers and Repairers  |           |      |   |
| 742       |      | ELECTRONICS AND TELECOMMUNICATIONS AND RELATED TRADES WORKERS                                       |           |      |   |
|           | 7421 | Electronics Mechanics and Servicers   |           |      |   |
|           | 7422 | Information and Communications Technology Installers and Servicers                                  |           |      |   |
| <b>75</b> |      | <b>FOOD PROCESSING, WOOD WORKING, GARMENT, LEATHER AND OTHER CRAFT AND RELATED TRADES WORKERS</b>   | <b>74</b> |      | <b>FOOD PROCESSING, WOODWORKING, TEXTILE, LEATHER AND RELATED TRADES WORKERS</b>                    |
| 750       |      | SUPERVISORS AND GENERAL FOREMEN (FOOD PROCESSING, WOODWORKING, GARMENT, LEATHER AND RELATED TRADES) | 740       |      | SUPERVISORS AND GENERAL FOREMEN (FOOD PROCESSING, WOODWORKING, TEXTILE, LEATHER AND RELATED TRADES) |
|           | 7500 | Supervisors and General Foreman (Food Processing, Woodworking, Garment, Leather and Related Trades) |           | 7400 | Supervisors and General Foremen (Food Processing, Woodworking, Textile, Leather and Related Trades) |
| 751       |      | FOOD PROCESSING AND RELATED TRADES WORKERS  | 741       |      | FOOD PROCESSING AND RELATED TRADES WORKERS  |
|           | 7511 | Meat and Fish Preparers   |           | 7411 | Meat and Fish Preparers   |
|           | 7512 | Bakers, Pastry and Confectionery Makers   |           | 7412 | Bakers, Pastry-Cooks and Confectionery Makers   |
|           | 7515 | Food and Beverage Tasters and Graders   |           | 7413 | Food And Beverage Tasters and Graders   |
|           | 7519 | Food Processing and Related Trades Workers Not Elsewhere Classified                                 |           | 7419 | Food Processing and Related Trades Workers Not Elsewhere Classified                                 |

| SSOC 2010 |  | SSOC 2005 |   |
|-----------|--|-----------|---|
| 752       | WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS             | 742       | WOOD TREATERS, CABINET MAKERS AND RELATED TRADES WORKERS                    |
| 7521      | Wood Treaters  | 7421      | Wood Treaters   |
| 7522      | Cabinet Makers and Wood Related Trades Workers                       | 7422      | Cabinet Makers and Related Workers  |
| 7529      | Furniture Makers and Related Trades Workers Not Elsewhere Classified | 7429      | Rattan Furniture Makers and Related Trades Workers Not Elsewhere Classified |
| 753       | GARMENT, LEATHER AND RELATED TRADES WORKERS                          | 743       | TEXTILE, GARMENT AND RELATED TRADES WORKERS                                 |
| 7531      | Tailors/Dressmakers  | 7431      | Tailors/Dressmakers   |
| 7532      | Garment and Related Pattern-Makers and Cutters                       | 7432      | Garment Cutters   |
| 7534      | Upholsterers and Related Workers                                     | 7433      | Textile, Leather and Related Pattern Makers                                 |
| 7536      | Shoemakers and Related Workers                                       | 7434      | Upholsterers and Related Workers  |
| 7539      | Garment and Related Trades Workers Not Elsewhere Classified          | 7439      | Textile, Garment and Related Trades Workers Not Elsewhere Classified        |
| 754       | OTHER CRAFT AND RELATED WORKERS                                      | 744       | LEATHER AND SHOEMAKING TRADES WORKERS                                       |
| 7540      | Other Craft and Related Workers                                      | 7440      | Shoemakers and Related Workers  |
|           |  | <b>79</b> | <b>PRODUCTION CRAFTSMEN AND RELATED WORKERS NOT ELSEWHERE CLASSIFIED</b>    |
|           |  | 790       | PRODUCTION CRAFTSMEN AND RELATED WORKERS NOT ELSEWHERE CLASSIFIED           |
|           |  | 7900      | Production Craftsmen and Related Workers Not Elsewhere Classified           |

**8 PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

**PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

| <b>SSOC 2010</b> |  | <b>SSOC 2005</b> |  |
|------------------|--|------------------|--|
| <b>81</b>        | <b>STATIONARY PLANT AND MACHINE OPERATORS</b>  | <b>81</b>        | <b>STATIONARY PLANT AND RELATED OPERATORS</b>                          |
| 810              | STATIONARY PLANT AND MACHINE SUPERVISORS AND GENERAL FOREMEN   | 810              | STATIONARY PLANT SUPERVISORS AND GENERAL FOREMEN                       |
| 8100             | Stationary Plant and Machine Supervisors and General Foremen   | 8100             | Stationary Plant Supervisors and General Foremen                       |
| 811              | MINING AND MINERAL PROCESSING PLANT OPERATORS  | 811              | MINING PLANT OPERATORS   |
| 8113             | Well Drillers and Borers and Other Mining Related Workers  | 8111             | Well Drillers And Borers And Related Workers                           |
| 8114             | Cement and Other Mineral Products Machine Operators  |                  |  |
| 812              | METAL PROCESSING, FINISHING AND PRODUCTS PLANT OPERATORS   | 812              | METAL PROCESSING PLANT OPERATORS                                       |
| 8121             | Metal Melters, Casters and Rolling Mill Operators  | 8121             | Ore And Metal Furnace Operators  |
| 8122             | Metal Heat Treating Plant Operators  | 8122             | Metal Melters, Casters and Rolling Mill Operators                      |
| 8123             | Metal Drawers and Extruders  | 8123             | Metal Heat Treating Plant Operators                                    |
| 8124             | Metal Finishing, Plating and Coating Machine Operators   | 8124             | Metal Drawers and Extruders  |
| 8125             | Machine-Tool Setter-Operators  | 813              | GLASS, CERAMICS AND RELATED PLANT OPERATORS                            |
| 813              | CHEMICAL PROCESSING, CHEMICAL AND PHOTOGRAPHIC PRODUCTS PLANT AND MACHINE OPERATORS                          | 8131             | Glass And Ceramics Kiln And Related Machine Operators                  |
| 8131             | Chemical Processing and Chemical Products Plant and Machine Operators  | 8139             | Fibreglass Makers and Related Plant Operators Not Elsewhere Classified |
| 8132             | Photographic Products Machine Operators  | 814              | WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS                        |
| 8133             | Pharmaceutical and Toiletry Products Machine Operators   | 8141             | Wood Processing Plant Operators  |
| 8139             | Chemical Processing, Chemical and Photographic Products Plant and Machine Operators Not Elsewhere Classified | 8142             | Paper Pulp Plant Operators   |
|                  |  | 8143             | Papermaking Plant Operators  |

| SSOC 2010 |   | SSOC 2005 |   |
|-----------|---|-----------|---|
| 814       | RUBBER, PLASTIC AND PAPER PRODUCTS MACHINE OPERATORS                            | 815       | CHEMICAL PROCESSING PLANT OPERATORS                                     |
| 8141      | Rubber Products Machine Operators   | 8150      | Chemical Processing Plant Operators                                     |
| 8142      | Plastic Products Machine Operators  | 816       | POWER GENERATING AND RELATED PLANT OPERATORS                            |
| 8143      | Paper and Paperboard Products Machine Operators                                 | 8161      | Power Generating Plant Operators  |
| 815       | TEXTILE, FUR AND LEATHER PRODUCTS MACHINE OPERATORS                             | 8162      | Steam Engine and Boiler Operators                                       |
| 8151      | Fibre Preparing, Spinning and Winding Machine Operators                         | 8169      | Water Treatment and Related Plant Operators<br>Not Elsewhere Classified |
| 8152      | Weaving and Knitting Machine Operators  | 817       | AUTOMATED ASSEMBLY LINE AND INDUSTRIAL ROBOT OPERATORS                  |
| 8153      | Sewing Machine Operators  | 8170      | Automated Assembly Line and Industrial Robot Operators                  |
| 8154      | Bleaching, Dyeing and Fabric Cleaning Machine Operators                         | 819       | OTHER STATIONARY PLANT AND RELATED PLANT OPERATORS                      |
| 8159      | Textile, Fur and Leather Products Machine Operators<br>Not Elsewhere Classified | 8190      | Other Stationary Plant and Related Plant Operators                      |
| 816       | FOOD AND RELATED PRODUCTS MACHINE OPERATORS                                     | <b>82</b> | <b>MACHINE OPERATORS AND ASSEMBLERS</b>                                 |
| 8161      | Meat and Fish Products Machine Operators  | 820       | MACHINE SUPERVISORS AND GENERAL FOREMEN                                 |
| 8162      | Dairy and Confectionery Products Machine Operators                              | 8200      | Machine Supervisors and General Foremen                                 |
| 8163      | Grain and Spice Milling Machine Operators                                       | 821       | METAL AND MINERAL PRODUCTS MACHINE OPERATORS                            |
| 8164      | Baked and Cereal Products Machine Operators                                     | 8211      | Machine-Tool Setter-Operators   |
| 8165      | Fruit, Vegetable and Nut Products Machine Operators                             |           |   |
| 8166      | Sugar Processing and Refining Machine Operators                                 |           |   |
| 8167      | Brewers and Wine and Other Beverage Machine Operators                           |           |   |
| 8168      | Tobacco Products Machine Operators  |           |   |
| 8169      | Food and Related Products Machine Operators<br>Not Elsewhere Classified         |           |   |

| SSOC 2010 |   | SSOC 2005 |  |
|-----------|---|-----------|--|
| 817       | WOOD PROCESSING AND PAPERMAKING PLANT OPERATORS                 | 8212      | Cement and Other Mineral Products Machine Operators          |
| 8171      | Pulp and Papermaking Plant Operators                            | 8221      | Pharmaceutical and Toiletry Products Machine Operators       |
| 8172      | Wood Processing Plant Operators                                 | 822       | CHEMICAL PRODUCTS MACHINE OPERATORS                          |
| 8173      | Wood Products Machine Operators                                 | 8222      | Metal Finishing, Plating and Coating Machine Operators       |
| 818       | OTHER STATIONARY PLANT AND MACHINE OPERATORS                    | 8223      | Photographic Products Machine Operators                      |
| 8181      | Glass and Ceramics Plant Operators                              | 8229      | Chemical Products Machine Operators Not Elsewhere Classified |
| 8182      | Steam Engine and Boiler Operators                               | 823       | RUBBER AND PLASTICS PRODUCTS MACHINE OPERATORS               |
| 8183      | Packing, Bottling and Labelling Machine Operators               | 8231      | Rubber Products Machine Operators                            |
| 8184      | Printing, Binding and Related Machine Operators                 | 8232      | Plastic Products Machine Operators                           |
| 8185      | Water Treatment and Related Machine Operators                   | 824       | WOOD PRODUCTS MACHINE OPERATORS                              |
| 8186      | Power Generating Plant Operators                                | 8240      | Wood Products Machine Operators                              |
| 8187      | Petroleum and Natural Gas Refining Plant Operators              | 825       | PRINTING, BINDING AND PAPER PRODUCTS MACHINE OPERATORS       |
| 8188      | Automated Assembly Line and Industrial Robot Operators          | 8251      | Printing Machine Operators                                   |
| 8189      | Stationary Plant and Machine Operators Not Elsewhere Classified | 8252      | Bookbinding and Related Machine Operators                    |
|           |   | 8253      | Paper and Paperboard Products Machine Operators              |
|           |   | 826       | TEXTILE PRODUCTS MACHINE OPERATORS                           |
|           |   | 8261      | Spinning and Winding Machine Operators                       |
|           |   | 8262      | Weaving and Knitting Machine Operators                       |
|           |   | 8263      | Sewing and Embroidering Machine Operators                    |
|           |   | 8264      | Textile Bleaching, Dyeing and Cleaning Machine Operators     |
|           |   | 8269      | Textile Products Machine Operators Not Elsewhere Classified  |

| SSOC 2010 |  |  | SSOC 2005 |      |  |
|-----------|--|--|-----------|------|--|
|           |  |  | 827       |      | FOOD AND RELATED PRODUCTS MACHINE OPERATORS                          |
|           |  |  |           | 8271 | Meat and Fish Processing Machine Operators                           |
|           |  |  |           | 8272 | Dairy and Confectionery Products Machine Operators                   |
|           |  |  |           | 8273 | Grain and Spice Milling Machine Operators                            |
|           |  |  |           | 8274 | Baked and Cereal Products Machine Operators                          |
|           |  |  |           | 8275 | Fruit, Vegetable and Nut Processing Machine Operators                |
|           |  |  |           | 8276 | Sugar Processing and Refining Machine Operators                      |
|           |  |  |           | 8277 | Brewers And Wine and Other Beverage Machine Operators                |
|           |  |  |           | 8278 | Tobacco Products Machine Operators                                   |
|           |  |  |           | 8279 | Food and Related Products Machine Operators Not Elsewhere Classified |
| <b>82</b> | <b>ASSEMBLERS AND QUALITY CHECKERS</b>                             |  |           |      |  |
| 820       | SUPERVISORS AND GENERAL FOREMEN OF ASSEMBLERS AND QUALITY CHECKERS |  | 828       |      | ASSEMBLERS AND QUALITY CHECKERS                                      |
|           | 8200   | Supervisors and General Foremen of Assemblers and Quality Checkers |           | 8281 | Assemblers   |
|           |  |  |           | 8282 | Quality Checkers and Testers   |
| 821       | ASSEMBLERS, QUALITY CHECKERS AND TESTERS                           |  | 829       |      | MACHINE OPERATORS NOT ELSEWHERE CLASSIFIED                           |
|           | 8212   | Electrical and Electronic Equipment Assemblers                     |           | 8290 | Machine Operators Not Elsewhere Classified                           |
|           | 8213   | Quality Checkers and Testers                                       |           |      |  |
|           | 8219   | Assemblers Not Elsewhere Classified                                |           |      |  |

| SSOC 2010 |  |  | SSOC 2005 |  |  |
|-----------|--|--|-----------|--|--|
| 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       |  | MOTOR VEHICLE DRIVERS                            |
|           | 8321                                   | Motorcycle Delivery Men                                      |           | 8321                                   | Motorcycle Delivery Men                          |
|           | 8322                                   | Car, Taxi and Van Drivers                                    |           | 8322                                   | Taxi Drivers                                     |
|           | 8329                                   | Car and Light Goods Vehicle Drivers Not Elsewhere Classified |           | 8323                                   | Driving Instructors and Testers                  |
|           |  |  |           | 8324                                   | Other Car and Light Goods Vehicle Drivers        |
| 833       |  | HEAVY TRUCK AND BUS DRIVERS                                  |           | 8325                                   | Bus Drivers                                      |
|           | 8331                                   | Bus and Tram Drivers   |           | 8326                                   | Lorry Drivers                                    |
|           | 8332                                   | Heavy Truck and Lorry Drivers                                |           | 8327                                   | Heavy Truck Drivers                              |
| 834       |  | MOBILE MACHINERY OPERATORS                                   | 833       |  | MOBILE MACHINERY OPERATORS                       |
|           | 8342                                   | Earth Moving and Related Machinery Operators                 |           | 8331                                   | Earth Moving and Related Machinery Operators     |
|           | 8343                                   | Crane, Hoist and Related Equipment Operators                 |           | 8332                                   | Crane, Hoist and Related Equipment Operators     |
|           | 8344                                   | Lifting Truck Operators                                      |           | 8339                                   | Other Mobile Machinery Operators                 |
|           | 8349                                   | Mobile Machinery Operators Not Elsewhere Classified          |           |  |  |
| 835       |  | SHIPS' DECK CREW AND RELATED WORKERS                         | 834       |  | SHIPS' DECK CREW AND RELATED WORKERS             |
|           | 8350                                   | Ships' Deck Crew and Related Workers                         |           | 8340                                   | Ships' Deck Crew and Related Workers             |

**9 CLEANERS, LABOURERS AND RELATED WORKERS**

**CLEANERS, LABOURERS AND RELATED WORKERS**

| <b>SSOC 2010</b> |                                     |  | <b>SSOC 2005</b> |                                     |  |
|------------------|-------------------------------------|--|------------------|-------------------------------------|--|
| <b>91</b>        | <b>CLEANERS AND RELATED WORKERS</b> |  | <b>91</b>        | <b>CLEANERS AND RELATED WORKERS</b> |  |
| 910              |                                     | CLEANING SUPERVISORS   | 911              |                                     | DOMESTIC HELPERS AND CLEANERS                                    |
|                  | 9100                                | Cleaning Supervisors   |                  | 9110                                | Domestic Helpers and Cleaners                                    |
| 911              |                                     | CLEANERS AND HELPERS IN HOTELS, OFFICES AND OTHER ESTABLISHMENTS | 912              |                                     | CLEANERS AND HELPERS IN OFFICES, HOTELS AND OTHER ESTABLISHMENTS |
|                  | 9112                                | Cleaners and Helpers in Hotels and Related Establishments        |                  | 9121                                | Laundry and Dry Cleaning Workers                                 |
|                  | 9113                                | Cleaners In Offices and Other Establishments                     |                  | 9122                                | Cleaners and Helpers In Hotels And Related Establishments        |
|                  |                                     |  |                  | 9129                                | Cleaners in Offices and Other Establishments                     |
| 912              |                                     | VEHICLE, WINDOW, LAUNDRY AND OTHER HAND CLEANING WORKERS         | 913              |                                     | TRANSPORT VEHICLE CLEANERS                                       |
|                  | 9121                                | Hand Launderers and Pressers                                     |                  | 9131                                | Motor Vehicle Cleaners/Polishers                                 |
|                  | 9122                                | Vehicle Cleaners   |                  | 9139                                | Other Transport Vehicle Cleaners                                 |
|                  | 9123                                | Window Cleaners  |                  |                                     |  |
|                  | 9129                                | Cleaning Workers Not Elsewhere Classified                        | 914              |                                     | GARBAGE COLLECTORS, SWEEPERS AND RELATED WORKERS                 |
| 913              |                                     | DOMESTIC HELPERS AND CLEANERS                                    |                  | 9141                                | Garbage Collectors   |
|                  | 9130                                | Domestic Helpers and Cleaners                                    |                  | 9142                                | Sweepers and Related Workers                                     |

| SSOC 2010 |  |  | SSOC 2005 |                                      |   |
|-----------|--|--|-----------|--------------------------------------|---|
| <b>92</b> | <b>AGRICULTURAL, FISHERY AND RELATED LABOURERS</b> |  | <b>93</b> | <b>LABOURERS AND RELATED WORKERS</b> |   |
| 921       |  | AGRICULTURAL, FISHERY AND RELATED LABOURERS                                  | 931       |                                      | AGRICULTURAL AND FISHERY LABOURERS AND RELATED WORKERS                          |
|           | 9214   | Park and Garden Maintenance Workers  |           | 9311                                 | Park and Garden Maintenance Workers   |
|           | 9219   | Agricultural, Fishery Labourers and Related Workers Not Elsewhere Classified |           | 9319                                 | Agricultural and Fishery Labourers and Related Workers Not Elsewhere Classified |
| <b>93</b> | <b>LABOURERS AND RELATED WORKERS</b>               |  |           |                                      |   |
| 931       |  | CONSTRUCTION LABOURERS AND RELATED WORKERS                                   | 932       |                                      | MANUFACTURING LABOURERS AND RELATED WORKERS                                     |
|           | 9310   | Civil Engineering and Building Construction Labourers                        |           | 9320                                 | Manufacturing Labourers and Related Workers                                     |
| 932       |  | MANUFACTURING LABOURERS AND RELATED WORKERS                                  | 933       |                                      | CONSTRUCTION LABOURERS AND RELATED WORKERS                                      |
|           | 9320   | Manufacturing Labourers and Related Workers                                  |           | 9330                                 | Construction Labourers and Related Workers                                      |
| 933       |  | TRANSPORT AND STORAGE LABOURERS  | 934       |                                      | TRANSPORT LABOURERS AND RELATED WORKERS   |
|           | 9331   | Hand and Pedal Vehicle Drivers   |           | 9341                                 | Material and Freight Handling Workers   |
|           | 9333   | Material and Freight Handling Workers  |           | 9342                                 | Pedal Vehicle Drivers   |
|           |  |  | 939       |                                      | LABOURERS AND RELATED WORKERS NOT ELSEWHERE CLASSIFIED                          |
|           |  |  |           | 9390                                 | Labourers and Related Workers Not Elsewhere Classified                          |
| <b>94</b> | <b>FOOD PREPARATION AND KITCHEN ASSISTANTS</b>     |  |           |                                      |   |
| 941       |  | FOOD PREPARATION AND KITCHEN ASSISTANTS                                      |           |                                      | See sub-major group 91 'CLEANERS AND RELATED WORKERS'.                          |
|           | 9410   | Food Preparation and Kitchen Assistants                                      |           |                                      |   |

| SSOC 2010 |  |                                  | SSOC 2005 |  |                              |
|-----------|--|----------------------------------|-----------|--|------------------------------|
| <b>96</b> | <b>REFUSE WORKERS AND OTHER ELEMENTARY WORKERS</b> |                                  | <b>92</b> | <b>PORTERS, ATTENDANTS AND RELATED WORKERS</b> |                              |
| 961       | REFUSE WORKERS                                     |                                  | 920       | PORTERS, ATTENDANTS AND RELATED WORKERS        |                              |
|           | 9611   | Garbage and Recycling Collectors |           | 9201   | Bell Captains                |
|           | 9613   | Sweepers and Related Workers     |           | 9202   | Bellboys/Hotel Porters       |
|           |  |                                  |           | 9203   | Porters (Except Hotel)       |
| 962       | PORTERS, ATTENDANTS AND RELATED WORKERS            |                                  |           | 9204   | Attendants                   |
|           | 9621   | Porters and Related Workers      |           | 9205   | Watchmen and Related Workers |
|           | 9625   | Attendants                       |           |  |                              |
|           | 9626   | Watchmen and Related Workers     |           |  |                              |
|           | 9629   | Other Elementary Workers         |           |  |                              |

**X WORKERS NOT CLASSIFIABLE BY OCCUPATION**

**X WORKERS NOT CLASSIFIABLE BY OCCUPATION**

| <b>SSOC 2010</b> |  | <b>SSOC 2005</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**

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|-------|---|-------|---|
| 29011 | Abbot                                       | 11150 | Administrator of employers' organisation      |
| 83502 | Able seaman                                 | 11150 | Administrator of labour union                 |
| 73149 | Abrasive wheel moulder                      | 11140 | Administrator of political party organisation |
| 73149 | Abrasive-coated cloth and paper maker       | 11150 | Administrator of professional association     |
| 81819 | Abrasives mixer                             | 11150 | Administrator of trade association            |
| 73120 | Accordion maker                             | 11150 | Administrator of trade union                  |
| 73120 | Accordion tuner                             | 11150 | Administrator of workers' organisation        |
| 24111 | Accountant (general)                        | 14330 | Administrator, arts                           |
| 33130 | Accountant, assistant                       | 25220 | Administrator, computer systems               |
| 24112 | Accountant, audit                           | 25211 | Administrator, database                       |
| 24111 | Accountant, casino                          | 11121 | Administrator, government                     |
| 24111 | Accountant, chartered                       | 25220 | Administrator, network                        |
| 24111 | Accountant, company                         | 34229 | Adventure training instructor                 |
| 24111 | Accountant, cost                            | 71323 | Advertisement painter (sign writing)          |
| 24111 | Accountant, cost and works                  | 33226 | Advertising accounts executive                |
| 24111 | Accountant, public                          | 26413 | Advertising copywriter                        |
| 72333 | Accounting and calculating machine mechanic | 34391 | Advertising illustrator                       |
| 44199 | Accounting machine operator                 | 12220 | Advertising manager                           |
| 12111 | Accounting manager (finance department)     | 34310 | Advertising photographer                      |
| 33130 | Accounting officer                          | 33392 | Advertising representative                    |
| 43119 | Accounts analyst                            | 33392 | Advertising salesman                          |
| 43112 | Accounts assistant                          | 24231 | Adviser, careers                              |
| 43112 | Accounts clerk                              | 23511 | Adviser, education methods                    |
| 43112 | Accounts payable (or receivable) bookkeeper | 23511 | Adviser, teaching methods                     |
| 40000 | Accounts section supervisor                 | 24212 | Advisory services, consultant, business       |
| 81872 | Acetylene filler                            | 26111 | Advocate                                      |
| 81314 | Acetylene plant operator                    | 74221 | Aerial erector (radio and television)         |
| 73161 | Acid polisher (glass decorating)            | 34310 | Aerial photographer                           |
| 81139 | Acidiser (oil and gas wells)                | 83439 | Aerial ropeway operator                       |
| 71249 | Acoustical insulator                        | 34424 | Aerialist                                     |
| 21110 | Acoustics physicist                         | 34223 | Aerobics instructor                           |
| 44110 | Acquisitions clerk (library)                | 21429 | Aerodrome construction engineer               |
| 34423 | Acrobat                                     | 21110 | Aerodynamicist                                |
| 26550 | Actor                                       | 73162 | Aerographing decorator (ceramics)             |
| 26550 | Actor, dramatic                             | 31182 | Aeronautical draughtsman                      |
| 26550 | Actor, film                                 | 31182 | Aeronautical draughtsperson                   |
| 33149 | Actuarial officer                           | 21445 | Aeronautical engineer                         |
| 21213 | Actuary                                     | 31152 | Aeronautical engineering technician           |
| 22302 | Acupuncturist                               | 72321 | Aeronautical mechanic                         |
| 43122 | Adjustment clerk (insurance)                | 31152 | Aerospace component repair technician         |
| 12112 | Administration manager                      |       |   |
| 11150 | Administrator of business association       |       |   |

|       |  |       |   |
|-------|--|-------|---|
| 31155 | Aerospace machining specialist                         | 31154 | Air-conditioning and refrigeration engineering technician |
| 61900 | Afforestation worker                                   | 71243 | Air-conditioning and refrigeration equipment insulator    |
| 53113 | After-school care centre worker                        | 21447 | Air-conditioning engineer                                 |
| 13430 | Aged care services manager                             | 31154 | Air-conditioning engineering technician                   |
| 33311 | Agent, clearing  | 54110 | Aircraft accident fire-fighter                            |
| 33311 | Agent, clearing and forwarding                         | 51112 | Aircraft cabin attendant                                  |
| 33330 | Agent, employment                                      | 91292 | Aircraft cabin cleaner                                    |
| 33340 | Agent, estate  | 31531 | Aircraft captain (air transport)                          |
| 33311 | Agent, forwarding                                      | 91292 | Aircraft cleaner  |
| 33311 | Agent, goods (railway)                                 | 21445 | Aircraft designer   |
| 33340 | Agent, house   | 74110 | Aircraft electrician                                      |
| 33211 | Agent, insurance                                       | 72322 | Aircraft engine fitter                                    |
| 33399 | Agent, literary  | 72322 | Aircraft engine fitter-assembler                          |
| 33229 | Agent, manufacturer's                                  | 72321 | Aircraft engine mechanic                                  |
| 29090 | Agent, patent  | 51112 | Aircraft hostess  |
| 33232 | Agent, procurement                                     | 71152 | Aircraft joiner   |
| 33340 | Agent, property  | 93333 | Aircraft loader   |
| 33232 | Agent, purchasing                                      | 31531 | Aircraft pilot (commercial airline)                       |
| 33340 | Agent, real estate                                     | 31532 | Aircraft pilot (except commercial airline and air force)  |
| 33312 | Agent, ship  | 71262 | Aircraft pipe and tube fitter                             |
| 33311 | Agent, shipping  | 72155 | Aircraft rigger   |
| 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                    | 31531 | 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                                   |
| 83490 | Agricultural machinery operator                        | 42244 | Airport receptionist                                      |
| 13101 | Agriculture manager                                    | 31158 | Airworthiness surveyor                                    |
| 21321 | Agronomist   | 81314 | Alcohol distiller   |
| 31429 | Agronomy technician                                    | 81314 | Alcohol stillman  |
| 31595 | 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)                                   |
| 31540 | Air traffic controller                                 | X5000 | Ambassador, foreign                                       |
| 13243 | Air traffic operations manager                         | 83291 | Ambulance driver  |
| 31571 | Air transport service supervisor                       | 32594 | Ambulance paramedic                                       |
| 81419 | Air-bag moulder (tyre making)                          | 14322 | Amusement park manager                                    |
| 81852 | Air-compressor operator                                | 81890 | Amusement ride operator                                   |
| 71272 | Air-conditioning and refrigerating equipment installer | 22141 | Anaesthesiologist   |
| 71271 | Air-conditioning and refrigerating equipment mechanic  | 22141 | Anaesthetist  |
| 21447 | Air-conditioning and refrigeration engineer            | 25140 | Analyst programmer  |
|       |  | 43119 | Analyst, accounts   |
|       |  | 24212 | Analyst, business   |

|       |  |       |   |
|-------|--|-------|---|
| 24131 | Analyst, credit                        | 31185 | Architectural draughtsperson                    |
| 24131 | Analyst, equities                      | 34310 | Architectural photographer                      |
| 24131 | Analyst, financial                     | 26211 | Archivist                                       |
| 24231 | Analyst, job                           | X4000 | Armed forces (foreign)                          |
| 24312 | Analyst, market research               | X3000 | Armed forces (Singapore)                        |
| 24231 | Analyst, occupational                  | 26532 | Arranger, ballet                                |
| 21212 | Analyst, operations research           | 26421 | Art critic                                      |
| 24220 | Analyst, policy                        | 26543 | Art director                                    |
| 24132 | Analyst, risk (financial)              | 26212 | Art gallery curator                             |
| 26323 | Analyst, social research               | 54123 | Art gallery guard                               |
| 25111 | Analyst, systems                       | 51139 | Art gallery guide                               |
| 21342 | Anatomist                              | 14330 | Art gallery manager                             |
| 21345 | Animal geneticist                      | 36202 | Art instructor (extracurriculum)                |
| 21313 | Animal histologist                     | 36202 | Art teacher (private tuition)                   |
| 51942 | Animal keeper (zoo)                    | 75390 | Artificial flower maker                         |
| 22500 | Animal pathologist                     | 61210 | Artificial inseminator (livestock)              |
| 21313 | Animal physiologist                    | 61223 | Artificial inseminator (poultry)                |
| 21345 | Animal scientist                       | 25190 | Artificial intelligence engineer                |
| 21313 | Animal taxonomist                      | 25190 | Artificial intelligence specialist              |
| 51942 | Animal trainer (zoo)                   | 32141 | Artificial limb fitter                          |
| 26542 | Animation director                     | 32142 | Artificial limb maker                           |
| 34364 | Animator                               | 26512 | Artist (painter)                                |
| 81220 | Annealer, metal                        | 34391 | Artist, commercial                              |
| 34411 | Announcer, radio                       | 26519 | Artist, creative (glass and ceramics)           |
| 34412 | Announcer, television                  | 34323 | Artist, display                                 |
| 81246 | Anodiser                               | 34391 | Artist, fashion                                 |
| 74221 | Antenna erector (radio and television) | 34361 | Artist, graphic                                 |
| 26322 | Anthropologist                         | 21620 | Artist, landscape                               |
| 26120 | Appeal court judge                     | 34391 | Artist, litho                                   |
| 25140 | Applications programmer                | 34391 | Artist, poster                                  |
| 75222 | Applier, veneer                        | 73162 | Artist, pottery                                 |
| 33151 | Appraiser                              | 34413 | Artiste, dubbing                                |
| 21327 | Aquaculturist                          | 34424 | Artiste, high-wire                              |
| 62212 | Aquarium fish breeder                  | 34424 | Artiste, trapeze                                |
| 62212 | Aquarium fish farm worker              | 33399 | Artistes agent                                  |
| 62212 | Aquarium fish farmer                   | 26543 | Artistic director                               |
| 51132 | Aquarium guide                         | 52419 | Artist's model                                  |
| 26120 | Arbitration court judge                | 14330 | Arts administrator                              |
| 21322 | Arboriculturist                        | 14330 | Arts manager                                    |
| 21322 | Arborist                               | 81142 | Asbestos cement product making machine operator |
| 26339 | Archaeologist                          | 81871 | Asphalt blender                                 |
| 29011 | Archbishop                             | 83425 | Asphalt spreading machine operator              |
| 21610 | Architect, building                    | 21462 | Assayer   |
| 25230 | Architect, infrastructure (IT)         | 74129 | Assembler and installer, electric sign          |
| 21620 | Architect, landscape                   | 82123 | Assembler, battery                              |
| 21444 | Architect, marine                      | 73111 | Assembler, chronometer                          |
| 21444 | Architect, naval                       | 73111 | Assembler, clock and watch                      |
| 25230 | Architect, network                     |       |   |
| 21610 | Architect, urban design                |       |   |
| 31185 | Architectural draughtsman              |       |   |

|       |  |       |  |
|-------|--|-------|--|
| 82121 | Assembler, electrical equipment              | 94102 | Assistant, cafeteria                             |
| 82122 | Assembler, electronic component              | 94102 | Assistant, canteen                               |
| 82122 | Assembler, electronic equipment              | 41101 | Assistant, clerical                              |
| 72139 | Assembler, furniture (sheet metal)           | 94102 | Assistant, coffee shop                           |
| 82121 | Assembler, industrial machinery (electrical) | 35120 | Assistant, computer systems analysis             |
| 75364 | Assembler, leather goods                     | 94102 | Assistant, hawkler (prepared food or drinks)     |
| 82199 | Assembler, metal products                    | 44110 | Assistant, library                               |
| 82122 | Assembler, microelectronics                  | 33493 | Assistant, operations liaison                    |
| 82121 | Assembler, office machine (electrical)       | 41201 | Assistant, personal                              |
| 82122 | Assembler, office machine (electronic)       | 41103 | Assistant, personnel                             |
| 73119 | Assembler, photographic equipment            | 35219 | Assistant, production                            |
| 82199 | Assembler, plastic products                  | 52202 | Assistant, shop                                  |
| 71199 | Assembler, prefabricated building section    | 94102 | Assistant, stall (coffee shop)                   |
| 82122 | Assembler, radio receiver                    | 94102 | Assistant, stall (prepared food or drinks)       |
| 82122 | Assembler, radio valve                       | 43141 | Assistant, statistical (general)                 |
| 82199 | Assembler, rubber goods                      | 43219 | Assistant, stores                                |
| 82122 | Assembler, semi-conductor device             | 32400 | Assistant, veterinary                            |
| 82122 | Assembler, television receiver               | 26120 | Assize judge                                     |
| 73111 | Assembler, watch and clock                   | 51910 | Astrologer                                       |
| 33152 | Assessor, insurance                          | 21110 | Astrometrist                                     |
| 33152 | Assessor, loss                               | 21110 | Astronomer                                       |
| 33493 | Asset securitisation executive               | 21110 | Astrophysicist                                   |
| 33130 | Assistant accountant                         | 34210 | Athlete  |
| 31005 | Assistant chemical engineer                  | 34221 | Athletic coach                                   |
| 31001 | Assistant civil engineer                     | 51112 | Attendant, aircraft cabin                        |
| 51202 | Assistant cook                               | 81821 | Attendant, boiler                                |
| 31002 | Assistant electrical engineer                | 96259 | Attendant, bowling alley                         |
| 31003 | Assistant electronics engineer               | 96254 | Attendant, car park                              |
| 31005 | Assistant engineer (chemical)                | 96259 | Attendant, cloakroom                             |
| 31001 | Assistant engineer (civil)                   | 96259 | Attendant, crematorium                           |
| 31002 | Assistant engineer (electrical)              | 51312 | Attendant, dining car (railway)                  |
| 31003 | Assistant engineer (electronic)              | 73162 | Attendant, dipping machine (ceramics decorating) |
| 31006 | Assistant engineer (manufacturing)           | 96259 | Attendant, fairground                            |
| 31004 | Assistant engineer (mechanical)              | 96259 | Attendant, fun-fair                              |
| 31006 | Assistant engineer (production)              | 96253 | Attendant, hospital                              |
| 31001 | Assistant engineer (structural)              | 96259 | Attendant, hot-room (bath)                       |
| 31006 | Assistant manufacturing engineer             | 96252 | Attendant, laboratory                            |
| 31004 | Assistant mechanical engineer                | 96259 | Attendant, lavatory                              |
| 32202 | Assistant nurse                              | 96251 | Attendant, library                               |
| 31006 | Assistant production engineer                | 96259 | Attendant, lift                                  |
| 31001 | Assistant structural engineer                | 93335 | Attendant, lorry                                 |
| 43112 | Assistant, accounts                          | 96253 | Attendant, mental hospital                       |
| 43113 | Assistant, audit                             | 96251 | Attendant, office                                |
|       |  | 81675 | Attendant, pasteuriser (malt liquor)             |



|       |   |       |  |
|-------|---|-------|--|
| 51330 | Bar hostess   | 51702 | Betting clerk                                |
| 81215 | Bar mill roller   | 73159 | Beveller, glass                              |
| 51330 | Bar/lounge hostess supervisor                               | 26229 | Bibliographer                                |
| 51412 | Barber  | 72339 | Bicycle repairer                             |
| 71151 | Barge builder (wood)  | 42141 | Bill collector                               |
| 31599 | Barge superintendent  | 71151 | Billboard erector                            |
| 83509 | Bargeman  | 34221 | Billiards instructor                         |
| 26524 | Baritone  | 34210 | Billiards player                             |
| 14123 | Barkeeper (working proprietor)                              | 43115 | Billing clerk                                |
| 51320 | Barman  | 59009 | Billposter                                   |
| 73119 | Barometer maker   | 81842 | Binder, book (machine)                       |
| 75229 | Barrel maker  | 21343 | Biochemist                                   |
| 26111 | Barrister   | 31411 | Biochemistry technician                      |
| 44170 | Barrister's clerk   | 26411 | Biographer                                   |
| 51320 | Bartender   | 21343 | Biological chemist                           |
| 75291 | Basket furniture maker                                      | 31411 | Biological technician                        |
| 75299 | Basket maker  | 21311 | Biologist (general)                          |
| 75299 | Basket weaver   | 21319 | Biologist, marine                            |
| 26524 | Bass singer   | 31411 | Biology laboratory technician                |
| 81314 | Batch still operator (chemical processes, except petroleum) | 21491 | Biomedical engineer                          |
| 26512 | Batik painter   | 21220 | Biometrician                                 |
| 73221 | Batik printer   | 21349 | Biophysicist                                 |
| 82123 | Battery assembler   | 21220 | Biostatistician                              |
| 54150 | Beach guard   | 31411 | Biotech laboratory technician                |
| 81419 | Bead builder (tyre making)                                  | 21329 | Biotechnologist, plant                       |
| 81691 | Bean curd making machine operator                           | 51942 | Bird keeper (bird park)                      |
| 81711 | Beater operator (paper pulp)                                | 54199 | Bird sanctuary warden                        |
| 73139 | Beater, gold  | 51942 | Bird trainer                                 |
| 72139 | Beater, panel (aircraft)                                    | 51132 | Birdpark guide                               |
| 72133 | Beater, panel (vehicle)                                     | 81641 | Biscuit baker                                |
| 51421 | Beautician  | 81641 | Biscuit maker                                |
| 75349 | Bedding maker   | 81641 | Biscuit making machine operator              |
| 96211 | Bell captain  | 81811 | Biscuit placer (ceramics)                    |
| 96212 | Bellboy   | 81811 | Biscuit-kiln fireman (pottery and porcelain) |
| 71151 | Bench carpenter   | 81811 | Biscuit-kiln fireman (tile)                  |
| 71152 | Bench joiner  | 29011 | Bishop                                       |
| 72142 | Bender and fixer, steel (reinforced concrete)               | 83425 | Bituminous paving machine operator           |
| 72149 | Bender and turner, ship frame                               | 75190 | Blachan maker                                |
| 72142 | Bender, bar (construction)                                  | 72211 | Blacksmith (general)                         |
| 73159 | Bender, glass tube  | 81659 | Blancher (nuts)                              |
| 72149 | Bender, metal plate   | 81211 | Blast furnaceman (ore smelting)              |
| 72149 | Bender, plate   | 81711 | Bleacher operator (papermaking)              |
| 75229 | Bender, wood  | 81319 | Bleacher operator, chemical                  |
| 81431 | Bending machine operator (paper box)                        | 81541 | Bleacher, textile                            |
| 81259 | Bending press operator, metal                               | 81871 | Blender (petroleum refining)                 |
| 93339 | Berthing man, dock  | 81871 | Blender, asphalt                             |
| 75361 | Bespoke shoemaker   | 81677 | Blender, coffee                              |
|       |   | 81871 | Blender, ethyl (petroleum refining)          |

|       |   |       |  |
|-------|---|-------|--|
| 75390 | Blender, fibre  | 34391 | Book illustrator                                 |
| 81871 | Blender, oil (petroleum refining)                             | 44110 | Book loan clerk                                  |
| 81871 | Blender, petroleum refining                                   | 81842 | Book sewing machine operator                     |
| 81677 | Blender, tea  | 81842 | Bookbinding machine operator                     |
| 75190 | Blender, tobacco  | 42210 | Booking clerk (travel agency)                    |
| 81679 | Blender, wine   | 52302 | Booking office cashier                           |
| 81311 | Blending machine operator<br>(chemical and related processes) | 43111 | Bookkeeper                                       |
| 81677 | Blending machine operator,<br>coffee                          | 43112 | Bookkeeper, accounts payable<br>(or receivable)  |
| 81677 | Blending machine operator, tea                                | 43111 | Bookkeeper, general ledger                       |
| 73221 | Block printer   | 43112 | Bookkeeping clerk                                |
| 71120 | Blocklayer  | 44199 | Bookkeeping machine operator                     |
| 26419 | Blogger   | 51702 | Bookmaker  |
| 32120 | Blood bank technician   | 51702 | Bookmaker's clerk                                |
| 73151 | Blower, glass   | 33510 | Border inspector                                 |
| 73151 | Blower, scientific glass                                      | 81132 | Borer, well (except oil and gas)                 |
| 81819 | Blowing machine operator, glass                               | 81255 | Boring machine operator<br>(metalworking)        |
| 14112 | Boarding house keeper (working<br>proprietor)                 | 81739 | Boring machine operator<br>(woodworking)         |
| 14111 | Boarding house manager  | 81255 | Boring machine setter-operator<br>(metalworking) |
| 93331 | Boat loader   | 81739 | Boring machine setter-operator<br>(woodworking)  |
| 71151 | Boatbuilder, wood   | 21312 | Botanist   |
| 83509 | Boatman   | 21312 | Botanist, soil                                   |
| 83509 | Boatman, ferry  | 81819 | Bottle making machine operator                   |
| 83509 | Boatman, motor  | 96299 | Bottle sorter (hand)                             |
| 83502 | Boatswain   | 81830 | Bottle washing machine operator                  |
| 81599 | Bobbin stripper   | 93201 | Bottler (hand)                                   |
| 72312 | Body builder, coach   | 81830 | Bottling machine operator                        |
| 75229 | Body builder, coach (wood)                                    | 54199 | Bouncer  |
| 72133 | Body repairer, vehicle  | 96259 | Bowling alley attendant                          |
| 54140 | Bodyguard   | 81431 | Box making machine operator<br>(paper box)       |
| 81626 | Boiler (sugar confectionery)                                  | 93201 | Boxer (hand packing)                             |
| 71242 | Boiler and pipe insulator                                     | 34210 | Boxer (professional sport)                       |
| 81821 | Boiler attendant  | 81830 | Boxing machine operator<br>(packing)             |
| 81821 | Boiler fireman  | 52302 | Box-office cashier                               |
| 72132 | Boilermaker   | 71290 | Bracer (construction)                            |
| 72132 | Boilermaking plater   | 32142 | Bracer maker (orthopaedic)                       |
| 81711 | Boilerman (paper pulp making)                                 | 81599 | Braid making machine operator                    |
| 81860 | Boilerman, power plant  | 81841 | Braille duplicating machine<br>operator          |
| 72132 | Boilersmith   | 73211 | Braille machine operator (plate<br>preparer)     |
| 51999 | Bomoh   | 72311 | Brake repairer                                   |
| 43123 | Bonds clerk   | 83121 | Brakeman, railway                                |
| 33111 | Bonds salesman  | 83121 | Brakeman, train                                  |
| 75119 | Boner, meat   |       |  |
| 32300 | Bonesetter  |       |  |
| 26421 | Book critic   |       |  |
| 26416 | Book editor   |       |  |
| 81843 | Book embosser (machine)                                       |       |  |
| 81843 | Book embossing machine<br>operator                            |       |  |

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| 81830 | Branding machine operator, goods                         | 71151 | Builder, boat (wood)                                 |
| 73120 | Brass band musical instrument maker                      | 72312 | Builder, coach body                                  |
| 72121 | Brazer   | 75229 | Builder, coach body (wood)                           |
| 75122 | Bread baker  | 75361 | Builder, heel (shoemaking)                           |
| 62212 | Breeder, aquarium fish                                   | 73120 | Builder, organ                                       |
| 61221 | Breeder, poultry   | 81419 | Builder, tyre  |
| 81673 | Brewer   | 72312 | Builder, vehicle body                                |
| 21496 | Brewery technologist                                     | 75229 | Builder, vehicle body (wood)                         |
| 81673 | Brewmaster   | 72312 | Builder, vehicle frame                               |
| 81811 | Brick and tile kilnman                                   | 75229 | Builder, vehicle frame (wood)                        |
| 71120 | Bricklayer   | 21610 | Building architect                                   |
| 71120 | Bricklayer (construction)                                | 96261 | Building caretaker                                   |
| 71120 | Bricklayer (firebrick)                                   | 21423 | Building construction engineer                       |
| 71120 | Bricklayer, kiln   | 71000 | Building construction general foreman                |
| 71120 | Bricklayer, oven   | 71000 | Building construction supervisor and general foreman |
| 21429 | Bridge construction engineer                             | 13232 | Building contractor (working proprietor)             |
| 83431 | Bridge or gantry crane operator (non-port)               | 74110 | Building electrician                                 |
| 83432 | Bridge or gantry crane operator (port)                   | 71332 | Building exterior cleaner                            |
| 81659 | Briner (foodstuffs)                                      | 71250 | Building glazier                                     |
| 21530 | Broadcast engineer                                       | 71241 | Building insulator                                   |
| 26421 | Broadcast journalist                                     | 74110 | Building maintenance electrician                     |
| 35214 | Broadcasting equipment operator (except sound recording) | 71331 | Building maintenance handyman                        |
| 35211 | Broadcasting operations technician                       | 31719 | Building maintenance inspector                       |
| 33241 | Broker, commodities                                      | 71331 | Building maintenance man                             |
| 33114 | Broker, commodities (financial)                          | 31719 | Building maintenance supervisor                      |
| 33112 | Broker, foreign exchange                                 | 71331 | Building maintenance worker                          |
| 33211 | Broker, insurance  | 71311 | Building painter                                     |
| 33111 | Broker, investment                                       | 33593 | Building permit licensing officer                    |
| 33112 | Broker, money  | 71331 | Building repairer                                    |
| 33399 | Broker, printing   | 71332 | Building structure cleaner                           |
| 33111 | Broker, securities                                       | 31123 | Building technician                                  |
| 33242 | Broker, ship   | 71192 | Building wrecker                                     |
| 33111 | Broker, stocks and shares                                | 83422 | Bulldozer operator                                   |
| 33241 | Broker, trade  | 33241 | 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  | 51129 | Bus conductor  |
| 71311 | Brush painter (building)                                 | 83311 | Bus driver   |
| 73169 | Brush painter (except construction)                      | 31599 | Bus station master                                   |
| 12111 | Budget manager   | 72311 | Bus, motor, mechanic                                 |
| 72241 | Buffing and polishing machine operator                   | 24212 | Business advisory services consultant                |
| 71151 | Builder, barge (wood)                                    | 24212 | Business analyst                                     |
|       |  | 24212 | Business consultant                                  |
|       |  | 12212 | Business development director                        |
|       |  | 33221 | Business development executive                       |
|       |  | 12212 | Business development manager                         |

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|-------|---|-------|--|
| 24212 | Business efficiency expert                        | 52301 | Cage supervisor                                      |
| 72333 | Business machine mechanic                         | 81419 | Calender operator, rubber                            |
| 33593 | Business permit licensing officer                 | 81549 | Calender operator, textile                           |
| 51509 | Butler  | 81549 | Calenderer, cloth                                    |
| 81623 | Butter making machine operator                    | 12242 | Call centre manager                                  |
| 81420 | Button maker (plastic)                            | 35214 | Camera control operator<br>(television broadcasting) |
| 33231 | Buyer   | 35213 | Camera operator, motion picture                      |
| 33231 | Buyer, merchandise (wholesale<br>or retail trade) | 35213 | Camera operator, television                          |
| 33232 | Buyer, supply requirements                        | 35212 | Camera operator, video                               |
|       |   | 73119 | Camera repairer                                      |
|       |   | 73215 | Cameraman, photogravure                              |
|       |   | 73219 | Cameraman, xerography (offset<br>printing)           |
|       |   | 51509 | Camp supervisor                                      |
|       |   | 81319 | Candle making machine operator                       |
|       |   | 75291 | Cane furniture maker                                 |
|       |   | 94102 | Canteen assistant                                    |
|       |   | 51202 | Canteen cook   |
|       |   | 14123 | Canteen keeper (working<br>proprietor)               |
|       |   | 52422 | Canvasser  |
|       |   | 52422 | Canvasser, sales                                     |
|       |   | 81830 | Capping and sealing machine<br>operator              |
|       |   | 51311 | Captain (catering service)                           |
|       |   | 51311 | Captain waiter                                       |
|       |   | 31531 | Captain, aircraft (air transport)                    |
|       |   | 31592 | Captain, port  |
|       |   | 51311 | Captain, restaurant                                  |
|       |   | 31521 | Captain, ship  |
|       |   | 91220 | Car cleaner  |
|       |   | 83299 | Car delivery driver                                  |
|       |   | 83222 | Car driver (private service)                         |
|       |   | 96254 | Car park attendant                                   |
|       |   | 52309 | Car park cashier                                     |
|       |   | 31579 | Car park supervisor                                  |
|       |   | 91220 | Car polisher   |
|       |   | 91220 | Car washer   |
|       |   | 72311 | Car, motor, mechanic                                 |
|       |   | 81719 | Carbon coating machine operator<br>(papermaking)     |
|       |   | 81660 | Carbonation man (sugar refining)                     |
|       |   | 81314 | Carbon-monoxide plant operator                       |
|       |   | 75119 | Carcass washer                                       |
|       |   | 72249 | Card grinder (textile)                               |
|       |   | 81432 | Cardboard lining machine<br>operator                 |
|       |   | 81432 | Cardboard-press operator                             |
|       |   | 75390 | Carder, fibre  |
|       |   | 22121 | Cardiologist   |

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|-------|---|
| 83221 | Cab driver                                |
| 51112 | Cabin attendant, aircraft                 |
| 51112 | Cabin attendant, ship                     |
| 51112 | Cabin steward, aircraft                   |
| 51112 | Cabin steward, ship                       |
| 75221 | Cabinet maker (furniture)                 |
| 72152 | Cable and rope splicer (general)          |
| 83439 | Cable car operator                        |
| 81131 | Cable driller, (oil and gas wells)        |
| 74132 | Cable jointer (electric cable)            |
| 74223 | Cable jointer, telephone and<br>telegraph |
| 74139 | Cable layer, underground                  |
| 93100 | Cable puller (cable laying)               |
| 72159 | Cable railway rigger                      |
| 74131 | Cableman, electric power<br>(overhead)    |
| 74139 | Cableman, electric power<br>(underground) |
| 74131 | Cableman, electric traction<br>(overhead) |
| 74223 | Cableman, telephone and<br>telegraph      |
| 83509 | Cable-ship hand                           |
| 21652 | Cadastral surveyor                        |
| 21529 | CAD-CAM engineer                          |
| 96259 | Caddie                                    |
| 96259 | Caddie, golf                              |
| 14123 | Café keeper (working proprietor)          |
| 14121 | Café manager                              |
| 94102 | Cafeteria assistant                       |
| 51202 | Cafeteria cook                            |
| 52492 | Cafeteria counter attendant               |
| 14123 | Cafeteria keeper (working<br>proprietor)  |
| 41109 | Cage secretary                            |

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|-------|---|-------|---|
| 22132 | Cardiothoracic surgeon                        | 41109 | Casino operations administrator               |
| 96261 | Caretaker, building                           | 41109 | Casino operations administrator assistant     |
| 31595 | Cargo officer, air                            | 14321 | Casino operations manager                     |
| 31574 | Cargo superintendent, ship's                  | 41109 | Casino operations scheduling clerk            |
| 26513 | Caricaturist                                  | 41109 | Casino operations slot administrator          |
| 71151 | Carpenter (general)                           | 51702 | Casino shuffler                               |
| 71151 | Carpenter, bench                              | 35290 | Casino surveillance technician                |
| 71151 | Carpenter, construction                       | 75229 | Cask maker                                    |
| 71151 | Carpenter, maintenance                        | 81141 | Cast concrete product making machine operator |
| 71151 | Carpenter, ship                               | 81149 | Cast stone making machine operator            |
| 71151 | Carpenter, stage and studio                   | 81141 | Caster, concrete product                      |
| 71151 | Carpenter, theatre                            | 73213 | Caster, electrotype                           |
| 71290 | Carpet layer                                  | 81219 | Caster, metal                                 |
| 75390 | Carpet maker (hand knotting)                  | 73141 | Caster, pottery and porcelain                 |
| 75390 | Carpet weaver (hand)                          | 73212 | Caster, stereotype                            |
| 81521 | Carpet weaving loom operator                  | 81249 | Casting finisher                              |
| 21654 | Cartographer, marine                          | 81420 | Casting machine operator (plastic goods)      |
| 31189 | Cartographical draughtsman                    | 73211 | Casting machine operator (printing type)      |
| 31189 | Cartographical draughtsperson                 | 81212 | Casting machine operator, centrifugal         |
| 81431 | Carton and paper box maker                    | 81214 | Casting machine operator, continuous          |
| 26513 | Cartoonist                                    | 81213 | Casting machine operator, die                 |
| 26513 | Cartoonist, motion picture                    | 26229 | Cataloguer                                    |
| 34399 | Carver, ivory                                 | 72149 | Catcher, rivet                                |
| 71131 | Carver, stone                                 | 14122 | Catering services manager                     |
| 71131 | Carver-setter, monument                       | 71312 | Ceiling paperhanger                           |
| 81739 | Carving machine operator (woodworking)        | 26521 | Cellist                                       |
| 81739 | Carving machine setter-operator (woodworking) | 81439 | Cellophane bag making machine operator        |
| 81220 | Case hardener, metal                          | 71143 | Cement finisher                               |
| 81139 | Caser (oil and gas wells)                     | 81312 | Cement furnaceman                             |
| 26351 | Caseworker, child welfare                     | 71144 | Cementer (oil and gas wells)                  |
| 26356 | Caseworker, family                            | 81212 | Centrifugal casting machine operator          |
| 26351 | Caseworker, social welfare                    | 81313 | Centrifugal separator operator                |
| 52303 | Cash accounting clerk                         | 81660 | Centrifuge operator (sugar refining)          |
| 52302 | Cash desk cashier                             | 73162 | Ceramic decorator                             |
| 52302 | Cashier (general)                             | 73162 | Ceramic dipper                                |
| 42111 | Cashier, bank                                 | 73162 | Ceramic enameller                             |
| 52302 | Cashier, booking office                       | 81313 | Ceramic filter operator                       |
| 52302 | Cashier, box-office                           | 73162 | Ceramic glazer                                |
| 52309 | Cashier, car park                             | 81811 | Ceramic kiln operator                         |
| 52302 | Cashier, cash desk                            |       |   |
| 52303 | Cashier, casino                               |       |   |
| 52302 | Cashier, check-out (self-service store)       |       |   |
| 52303 | Cashier, office                               |       |   |
| 52302 | Cashier, restaurant                           |       |   |
| 52303 | Cashier, retail                               |       |   |
| 52302 | Cashier, store                                |       |   |
| 81139 | Casing puller (oil and gas wells)             |       |   |
| 24111 | Casino accountant                             |       |   |

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| 73162 | Ceramic painter                                   | 81311 | Chemical mixing machine operator  |
| 73162 | Ceramic spray painter                             | 81314 | Chemical reactor operator         |
| 21495 | Ceramics technologist                             | 81312 | Chemicals cooker                  |
| 81649 | Cereal processing machine operator                | 81311 | Chemicals crusher operator        |
| 73139 | Chain maker (precious metal)                      | 81311 | Chemicals miller                  |
| 14201 | Chain store manager                               | 81312 | Chemicals roaster                 |
| 93100 | Chainman (surveying)                              | 21130 | Chemist (general)                 |
| 83439 | Chair-lift operator                               | 21343 | Chemist, biological               |
| 11122 | Chairman (statutory board)                        | 21130 | Chemist, detergents               |
| 11201 | Chairman, company                                 | 21130 | Chemist, dye                      |
| 91121 | Chambermaid                                       | 21130 | Chemist, food                     |
| 29011 | Chaplain  | 21130 | Chemist, glass                    |
| 71000 | Chargehand (construction)                         | 21130 | Chemist, leather                  |
| 81219 | Charger, furnace (metal melting and reheating)    | 21130 | Chemist, metallurgical            |
| 81211 | Charger, furnace (ore smelting and refining)      | 21130 | Chemist, paint                    |
| 81312 | Char-kiln tender (chemical and related processes) | 21130 | Chemist, petroleum                |
| 24111 | Chartered accountant                              | 21130 | Chemist, pharmaceutical           |
| 31593 | Charterer, ship                                   | 21130 | Chemist, plastics                 |
| 83222 | Chauffeur, private motor car                      | 21130 | Chemist, polymers                 |
| 31535 | Check pilot                                       | 21130 | Chemist, quality control          |
| 91210 | Checker (laundry service)                         | 21130 | Chemist, rubber                   |
| 82131 | Checker, electrical products (quality assurance)  | 21130 | Chemist, textiles                 |
| 82131 | Checker, electronic products (quality assurance)  | 31111 | Chemistry technician              |
| 51390 | Checker, food (catering service)                  | 81689 | Cheroot making machine operator   |
| 82132 | Checker, mechanical products (quality assurance)  | 75299 | Chick maker                       |
| 52302 | Check-out cashier (self-service store)            | 61221 | Chicken farmer                    |
| 51201 | Chef de cuisine (restaurant)                      | 40000 | Chief clerk (general office)      |
| 51201 | Chef de partie (restaurant)                       | 26422 | Chief editor (newspaper)          |
| 81319 | Chemical bleacher operator                        | 31511 | Chief engineer (ship)             |
| 21451 | Chemical engineer (general)                       | 31511 | Chief engineer officer (ship)     |
| 21453 | Chemical engineer (petrochemicals)                | 31511 | Chief engineer, ship's            |
| 21452 | Chemical engineer (petroleum)                     | 11201 | Chief executive (company)         |
| 31005 | Chemical engineer, assistant                      | 11122 | Chief executive (statutory board) |
| 31161 | Chemical engineering technician (general)         | 13301 | Chief information officer (IT)    |
| 31162 | Chemical engineering technician (natural gas)     | 26120 | Chief justice                     |
| 31163 | Chemical engineering technician (petrochemicals)  | 11203 | Chief operating officer           |
| 31162 | Chemical engineering technician (petroleum)       | 13301 | Chief security officer (IT)       |
| 31111 | Chemical laboratory technician                    | 51502 | Chief steward (hotel)             |
|       |   | 51111 | Chief steward (ship)              |
|       |   | 13301 | Chief technology officer (IT)     |
|       |   | 51202 | Chief cook                        |
|       |   | 53113 | Child care assistant              |
|       |   | 34129 | Child care inspector              |
|       |   | 13410 | Child care services manager       |
|       |   | 36100 | Child care teacher                |
|       |   | 53113 | Child care worker                 |
|       |   | 53114 | Child residential care assistant  |
|       |   | 26351 | Child welfare caseworker          |

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| 32300 | Chinese herbalist                                | 21432 | Civil engineer (sewerage)                                     |
| 75190 | Chinese medicated wine maker                     | 21424 | Civil engineer (soil mechanics)                               |
| 22301 | Chinese physician                                | 21429 | Civil engineer (tunnel construction)                          |
| 22302 | Chinese physician (acupuncturist)                | 31001 | Civil engineer, assistant                                     |
| 22301 | Chinese sinseh                                   | 71000 | Civil engineering construction general foreman                |
| 81711 | Chipper, log (machine)                           | 71000 | Civil engineering construction supervisor and general foreman |
| 32300 | Chiropodist                                      | 21421 | Civil engineering consultant (general)                        |
| 32592 | Chiropractor                                     | 13232 | Civil engineering contractor (working proprietor)             |
| 81319 | Chlorine gas maker                               | 31184 | Civil engineering draughtsman                                 |
| 81314 | Chlorine plant operator                          | 31184 | Civil engineering draughtsperson                              |
| 81625 | Chocolate making machine operator                | 31121 | Civil engineering technician (general)                        |
| 81625 | Chocolate making press operator                  | 26111 | Civil lawyer  |
| 26523 | Choirmaster                                      | 11121 | Civil service commissioner                                    |
| 26532 | Choreographer                                    | 71193 | Cladding and curtain wall erector                             |
| 26531 | Chorus dancer                                    | 33152 | Claims adjuster   |
| 26523 | Chorus master                                    | 43122 | Claims clerk, insurance                                       |
| 73111 | Chronometer assembler                            | 33152 | Claims inspector  |
| 96261 | Church janitor                                   | 81660 | Clarifier operator (sugar refining)                           |
| 75190 | Chutney maker                                    | 75390 | Clarifier, textile fibre                                      |
| 81689 | Cigar making machine operator                    | 81679 | Clarifier, wine   |
| 81689 | Cigarette machine catcher                        | 73149 | Clay extruding press operator                                 |
| 81681 | Cigarette making machine operator                | 81819 | Clay fitter press operator                                    |
| 59001 | Cinema film projectionist                        | 81819 | Clay grinder  |
| 14323 | Cinema manager                                   | 81819 | Clay millman  |
| 59001 | Cinema projectionist                             | 81819 | Clay mixer  |
| 26543 | Cinematographer                                  | 91122 | Cleaner (hotel)   |
| 26543 | Cinematography director                          | 91132 | Cleaner (industrial establishment)                            |
| 81732 | Circular sawyer (precision)                      | 91129 | Cleaner (restaurant)  |
| 34421 | Circus comic                                     | 91292 | Cleaner, aircraft   |
| 21429 | Civil engineer (aerodrome construction)          | 91292 | Cleaner, aircraft cabin                                       |
| 21429 | Civil engineer (bridge construction)             | 71332 | Cleaner, building exterior                                    |
| 21423 | Civil engineer (building construction)           | 91220 | Cleaner, bus  |
| 21429 | Civil engineer (dock and harbour construction)   | 91220 | Cleaner, car  |
| 21429 | Civil engineer (dredging)                        | 91210 | Cleaner, carpet   |
| 21421 | Civil engineer (general)                         | 91132 | Cleaner, factory  |
| 21429 | Civil engineer (highway and street construction) | 91122 | Cleaner, hotel  |
| 21429 | Civil engineer (hydraulics)                      | 81248 | Cleaner, metal  |
| 21429 | Civil engineer (hydrographic)                    | 91220 | Cleaner, motor vehicle  |
| 21424 | Civil engineer (piling)                          | 91139 | Cleaner, MRT station  |
| 21429 | Civil engineer (railway construction)            | 91131 | Cleaner, office   |
| 21429 | Civil engineer (road construction)               | 96130 | Cleaner, park   |
| 21432 | Civil engineer (sanitary)                        | 91293 | Cleaner, railway carriage                                     |
|       |  | 91139 | Cleaner, recreation centre                                    |
|       |  | 91291 | Cleaner, ship   |
|       |  | 91291 | Cleaner, ship tank  |

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| 91139 | Cleaner, sports complex                    | 43122 | Clerk, insurance                      |
| 81248 | Cleaner, ultrasonic (metal)                | 43211 | Clerk, inventory (stock control)      |
| 91230 | Cleaner, window                            | 43129 | Clerk, investment                     |
| 12199 | Cleaning services manager                  | 43115 | Clerk, invoice                        |
| 91000 | Cleaning supervisor                        | 43219 | Clerk, inward freight                 |
| 91129 | Clearer, table (catering service)          | 44170 | Clerk, judge's                        |
| 33311 | Clearing agent                             | 44170 | Clerk, law                            |
| 33311 | Clearing and forwarding agent              | 43112 | Clerk, ledger                         |
| 43119 | Clearing house clerk (banking)             | 44170 | Clerk, legal                          |
| 41101 | Clerical assistant                         | 44110 | Clerk, library                        |
| 40000 | Clerical supervisor (general)              | 43221 | Clerk, material planning              |
| 44170 | Clerk of court                             | 43129 | Clerk, mortgage                       |
| 31125 | Clerk of works                             | 41101 | Clerk, office (general)               |
| 43112 | Clerk, accounts                            | 43221 | Clerk, order (material planning)      |
| 44110 | Clerk, acquisitions (library)              | 43239 | Clerk, parcel (railway)               |
| 43122 | Clerk, adjustment (insurance)              | 43114 | Clerk, payroll                        |
| 43119 | Clerk, auction                             | 41103 | Clerk, personnel                      |
| 43113 | Clerk, audit                               | 43221 | Clerk, planning (materials supply)    |
| 43121 | Clerk, bank operations                     | 43222 | Clerk, planning (production)          |
| 44170 | Clerk, barrister's                         | 43122 | Clerk, policy (insurance)             |
| 43115 | Clerk, billing                             | 42112 | Clerk, postal service counter         |
| 43123 | Clerk, bonds                               | 44170 | Clerk, probate                        |
| 44110 | Clerk, book loan                           | 43222 | Clerk, production planning            |
| 42210 | Clerk, booking (travel agency)             | 43116 | Clerk, purchasing                     |
| 43112 | Clerk, bookkeeping                         | 43219 | Clerk, receiving and despatching      |
| 43119 | Clerk, bookmaker's                         | 41103 | Clerk, records (personnel department) |
| 43123 | Clerk, brokerage                           | 43211 | Clerk, records (stock control)        |
| 43122 | Clerk, broker's (insurance)                | 43119 | Clerk, remittance                     |
| 52303 | Clerk, cash accounting                     | 42210 | Clerk, reservations (travel agency)   |
| 40000 | Clerk, chief (general office)              | 43239 | Clerk, routing (freight)              |
| 43119 | Clerk, clearing house (banking)            | 41109 | Clerk, safe deposit                   |
| 43149 | Clerk, coding (data processing)            | 43114 | Clerk, salaries                       |
| 43129 | Clerk, collateral                          | 43115 | Clerk, sales                          |
| 44170 | Clerk, conveyancing                        | 43221 | Clerk, schedule (material planning)   |
| 43222 | Clerk, co-ordinating (production planning) | 43222 | Clerk, schedule (production planning) |
| 41109 | Clerk, correspondence                      | 43123 | Clerk, securities                     |
| 43119 | Clerk, cost                                | 43231 | Clerk, shipping                       |
| 43119 | Clerk, cost computing                      | 43231 | Clerk, shipping (freight)             |
| 42112 | Clerk, counter (post office)               | 44170 | Clerk, solicitor's                    |
| 43129 | Clerk, credit                              | 41103 | Clerk, staff records                  |
| 43151 | Clerk, data processing control             | 43141 | Clerk, statistical (general)          |
| 43219 | Clerk, despatching and receiving           | 43211 | Clerk, stock control                  |
| 42249 | Clerk, enquiries                           | 43211 | Clerk, stock records                  |
| 41102 | Clerk, filing                              | 43212 | Clerk, storeroom                      |
| 43129 | Clerk, finance                             | 43212 | Clerk, stores                         |
| 43219 | Clerk, freight receiving                   | 43212 | Clerk, supply                         |
| 41101 | Clerk, general office                      | 43219 | Clerk, tally                          |
| 44110 | Clerk, index (library)                     |       |                                       |
| 42249 | Clerk, information                         |       |                                       |
| 42249 | Clerk, inquiries                           |       |                                       |

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| 43119 | Clerk, tax                                   | 81719 | Coating machine operator, paper           |
| 52302 | Clerk, ticket (booking office)               | 81419 | Coating machine operator, rubber          |
| 42210 | Clerk, ticketing (travel agency)             | 81243 | Coating machine operator, wire            |
| 43149 | Clerk, traffic                               | 75363 | Cobbler                                   |
| 43239 | Clerk, traffic (freight)                     | 81678 | Cocoa bean roasting machine operator      |
| 42210 | Clerk, travel agency                         | 81678 | Cocoa grinding machine operator           |
| 42210 | Clerk, travel reservations                   | 61900 | Coconut farm worker                       |
| 42210 | Clerk, travel service                        | 61900 | Coconut farmer                            |
| 41312 | Clerk, typing                                | 81653 | Coconut oil miller                        |
| 43114 | Clerk, wages                                 | 43149 | Coder, statistical                        |
| 43212 | Clerk, warehouse                             | 43149 | Coding clerk (data processing)            |
| 75361 | Clicker cutter (shoemaking)                  | 75151 | Coffee and tea taster                     |
| 75361 | Clicking machine operator (shoemaking)       | 81678 | Coffee bean roasting machine operator     |
| 21120 | Climatologist                                | 81677 | Coffee blender                            |
| 42243 | Clinic receptionist                          | 81677 | Coffee blending machine operator          |
| 13420 | Clinical director                            | 81678 | Coffee grinding machine operator          |
| 32201 | Clinical nurse                               | 51202 | Coffee house cook                         |
| 22146 | Clinical pathologist                         | 94102 | Coffee shop assistant                     |
| 26340 | Clinical psychologist                        | 14123 | Coffee shop keeper (working proprietor)   |
| 81722 | Clipping machine operator (veneer cutting)   | 75151 | Coffee taster                             |
| 96259 | 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                                 | 43142 | Collector, public opinion                 |
| 73149 | Cloth maker, abrasive-coated                 | 96111 | Collector, refuse                         |
| 81543 | Cloth shrinker                               | 42149 | Collector, rent                           |
| 81543 | Cloth washer (textile making)                | 96259 | Collector, ticket                         |
| 81521 | Cloth weaver                                 | 42149 | Collector, toll                           |
| 81521 | Cloth weaving loom operator                  | 42149 | Collector, turnstile                      |
| 34351 | Clothes designer                             | 81320 | Colour printer operator (photography)     |
| 34421 | Clown  | 26421 | Columnist                                 |
| 72312 | Coach body builder                           | 75390 | Comber, fibre                             |
| 75229 | Coach body builder (wood)                    | 81719 | Combiner operator (papermaking)           |
| 83311 | Coach driver                                 | 34421 | Comic, circus                             |
| 34221 | Coach, athletic                              | 31531 | Commercial airline pilot                  |
| 34221 | Coach, games                                 | 34391 | Commercial artist                         |
| 34221 | Coach, sports                                | 34391 | Commercial illustrator                    |
| 81149 | Coal crusher operator                        |       |   |
| 21469 | Coal mining engineer                         |       |   |
| 31199 | Coal mining technician                       |       |   |
| 62220 | Coastal waters fisherman                     |       |   |
| 81331 | Coater, tablet                               |       |   |
| 81331 | Coating machine operator (tablets and pills) |       |   |

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|-------|--|-------|--|
| 12211 | Commercial manager<br>(manufacturing or mining<br>company) | 74222 | Computer and related equipment<br>fitter             |
| 34310 | Commercial photographer                                    | 74222 | Computer and related equipment<br>mechanic           |
| 34352 | Commercial products designer                               | 35120 | Computer database assistant                          |
| 23109 | Commercial school teacher                                  | 35120 | Computer engineering assistant                       |
| 33229 | Commercial traveller                                       | 34362 | Computer games designer                              |
| 26544 | Commercials, director of                                   | 25123 | Computer games developer                             |
| 26544 | Commercials, producer of                                   | 26541 | Computer games producer                              |
| 11121 | Commissioned police officer                                | 21522 | Computer hardware engineer                           |
| 11121 | Commissioner of inland revenue                             | 35120 | Computer helpdesk operator                           |
| 11121 | Commissioner, high<br>(government)                         | 35110 | Computer high-speed printer<br>operator              |
| 33241 | Commodities broker   | 35120 | Computer network technician                          |
| 33114 | Commodities broker (financial)                             | 13303 | Computer operations and<br>network manager           |
| 33114 | Commodities trader (financial)                             | 35110 | Computer operator                                    |
| 33114 | Commodities trading advisor                                | 35110 | Computer peripheral equipment<br>operator            |
| 33114 | Commodities trading advisor's<br>representative            | 25140 | Computer programmer                                  |
| 33114 | Commodity futures broker                                   | 35120 | Computer programming assistant                       |
| 33114 | Commodity futures pool operator                            | 33222 | Computer sales engineer                              |
| 33114 | Commodity futures pool<br>operator's representative        | 33222 | Computer sales representative                        |
| 34129 | Community development worker                               | 25121 | Computer software engineer                           |
| 32595 | Community health worker                                    | 25220 | Computer systems administrator                       |
| 34129 | Community service worker                                   | 21522 | Computer systems engineer                            |
| 24111 | Company accountant   | 35120 | Computer systems technician                          |
| 11201 | Company chairman   | 36203 | Computer teacher (computer<br>training school)       |
| 11202 | Company director   | 35120 | Computer technician                                  |
| 22149 | Company doctor   | 26524 | Concert singer                                       |
| 34412 | Compere  | 96261 | Concierge (apartment house)                          |
| 34412 | Compere, stage   | 96211 | Concierge, hotel                                     |
| 34412 | Compere, television  | 33462 | Conciliator, labour                                  |
| 26522 | Composer   | 33462 | Conciliator, labour management<br>relations          |
| 26522 | Composer, music  | 71149 | Concrete curer                                       |
| 73211 | Composing machine operator<br>(linotype)                   | 71143 | Concrete finisher                                    |
| 71220 | Composition tile layer                                     | 83425 | Concrete finishing machine<br>operator (road paving) |
| 73211 | Compositor   | 71142 | Concrete form worker                                 |
| 81311 | Compounder (chemical and<br>related processes)             | 81144 | Concrete mixer operator                              |
| 81871 | Compounder (petroleum refining)                            | 81144 | Concrete mixing plant operator                       |
| 81311 | Compounder, resin (chemical<br>and related processes)      | 83425 | Concrete paving machine<br>operator                  |
| 81419 | Compounder, rubber   | 81141 | Concrete product caster                              |
| 81420 | Compression moulding machine<br>operator, plastics         | 81145 | Concrete pump operator                               |
| 81852 | Compressor operator (air)                                  | 72142 | Concrete reinforcing iron worker                     |
| 81852 | Compressor operator (gas)                                  | 71142 | Concrete shutterer                                   |
| 13301 | Computer and information<br>systems manager                | 83329 | Concrete truck driver                                |
|       |  | 71141 | Concrete, reinforced (general)                       |

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|-------|--|-------|--|
| 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  | 34423 | 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)                      |
| 34422 | Conjurer   | 13232 | Contractor, road building (working proprietor)                   |
| 26213 | Conservator (art works)  | 26524 | Contralto  |
| 35110 | Console operator (electronic data processing)                            | 31540 | Controller, air traffic  |
| 54121 | Constable  | 12111 | Controller, financial  |
| 54121 | Constable, police  | 31560 | Controller, sea traffic  |
| 71151 | Construction carpenter   | 81871 | Controlman (petroleum refining)                                  |
| 75402 | Construction diver   | 33320 | Convention co-ordinator  |
| 31129 | Construction inspector   | 33320 | Convention organiser   |
| 71152 | Construction joiner  | 81314 | Converter operator (chemical processes, except petroleum)        |
| 93100 | Construction labourer  | 34110 | Conveyance executive   |
| 72333 | Construction machinery mechanic  | 44170 | Conveyancing clerk   |
| 13231 | Construction manager   | 83439 | Conveyer operator  |
| 72143 | Constructional steel erector   | 51202 | Cook, cafeteria  |
| X5000 | Consul general, foreign  | 51202 | Cook, canteen  |
| X5000 | Consular official, foreign   | 51202 | Cook, coffee house   |
| 24212 | Consultant, business   | 51202 | Cook, commis   |
| 24212 | Consultant, business advisory services                                   | 51201 | Cook, hotel  |
| 24232 | Consultant, executive search   | 51202 | Cook, pastry (restaurant)  |
| 24231 | Consultant, human resource   | 51202 | Cook, private service  |
| 25112 | Consultant, IT business  | 51202 | Cook, restaurant   |
| 25112 | Consultant, IT business process  | 51202 | Cook, ship's   |
| 24211 | Consultant, management   | 81312 | Cooker (chemical and related processes)                          |
| 24320 | Consultant, public relation  | 81312 | Cooker, chemicals  |
| 33493 | Consumer banking branch operations and processing executive              | 81673 | Cooker, malt   |
| 33120 | Consumer banking credit control executive                                | 81629 | Cooler operator (dairy products)                                 |
| 42246 | Contact centre information clerk   | 81855 | Cooling plant operator   |
| 81890 | Container filling machine operator (except compressed and liquefied gas) | 75229 | Cooper   |
| 83322 | Container truck driver   | 43222 | Co-ordinating clerk (production planning)                        |
| 26415 | Continuity and script editor   |       |  |
| 26419 | Continuity writer  |       |  |

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|-------|--|-------|---|
| 33320 | Co-ordinator, convention   | 26354 | Counsellor, rehabilitation                            |
| 33320 | Co-ordinator, exhibition   | 26359 | Counsellor, student vocational                        |
| 43151 | Co-ordinator, production<br>(computer operations)                  | 26359 | Counsellor, vocational guidance                       |
| 33222 | Co-ordinator, technical sales                                      | 52301 | Count supervisor                                      |
| 31531 | Co-pilot   | 42112 | Counter clerk, post office                            |
| 81149 | Copper floatation man  | 83121 | Coupler, yard (railway)                               |
| 72139 | Coppersmith  | 51604 | Courier (despatch)                                    |
| 81653 | Copra miller   | 51131 | Courier (travel)                                      |
| 61900 | Copra producer (plantation)  | 51601 | Courier service supervisor                            |
| 26413 | Copywriter, advertising  | 39102 | Court interpreter                                     |
| 26414 | Copywriter, technical  | 41202 | Court reporter  |
| 72112 | Core-blower operator   | 83501 | Coxswain, lifeboat                                    |
| 81723 | Core-laying machine operator<br>(plywood manufacture)              | 36202 | Crafts teacher (private tuition)                      |
| 72112 | Coremaker  | 83431 | Crane operator (bridge or gantry<br>crane) (non-port) |
| 72112 | Coremaker, tube  | 83432 | Crane operator (bridge or gantry<br>crane) (port)     |
| 61900 | Corn farmer  | 83431 | Crane operator (floating crane)                       |
| 81630 | Corn milling machine operator                                      | 83431 | Crane operator (locomotive<br>crane)                  |
| 26120 | Coroner  | 83431 | Crane operator (mobile crane)                         |
| 33493 | Corporate banking cash<br>management executive                     | 83431 | Crane operator (stationary jib-<br>crane)             |
| 33120 | Corporate banking credit control<br>executive                      | 83431 | Crane operator (tower crane)                          |
| 33493 | Corporate banking structured &<br>project financing executive      | 93201 | Crater (hand)   |
| 33493 | Corporate banking transactional<br>services executive              | 83431 | Crawler crane operator                                |
| 33450 | Corporate communications officer                                   | 83424 | Crawler drill operator                                |
| 33493 | Corporate finance origination,<br>structuring & advisory executive | 81890 | Crayon press machine operator                         |
| 33225 | Corporate finance sales &<br>distribution executive                | 81431 | Creasing and cutting press<br>operator (paper box)    |
| 12130 | Corporate planning manager   | 26519 | Creative artist (glass and<br>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<br>(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<br>(papermaking)             |
| 43119 | Cost clerk   | 33464 | Crewing officer (ship)                                |
| 43119 | Cost computing clerk   | 62220 | Crewman, trawler                                      |
| 40000 | Cost section supervisor  | 62220 | Crewman, tuna boat                                    |
| 34351 | Costume designer   | 62220 | Crewman, whaler                                       |
| 34351 | Costume designer (film)  | 83509 | Crewman, yacht  |
| 34351 | Costume designer (stage)   | 26421 | Crime reporter  |
| 34351 | Costume designer (studio)  | 26111 | Criminal lawyer                                       |
| 26355 | Counsellor, drugs and alcohol                                      | 26321 | Criminologist   |
| 26356 | Counsellor, family   | 81719 | Crinkling machine operator<br>(papermaking)           |
|       |  | 34129 | Crisis intervention worker                            |

- 26421 Critic  
 26421 Critic, art  
 26421 Critic, book  
 26421 Critic, drama  
 26421 Critic, film  
 26421 Critic, literary  
 26421 Critic, music  
 75390 Crocheter (hand)  
 81522 Crocheting machine operator  
 62213 Crocodile farm worker  
 62213 Crocodile farmer  
 51943 Crocodile trainer  
 51702 Croupier  
 81811 Crucible maker (saggars)  
 81311 Crusher operator (chemical and related processes)  
 81652 Crusher operator (edible oil processing)  
 81149 Crusher operator (minerals)  
 73161 Crystal glass cutter (decorative)  
 81660 Crystalliser operator (sugar refining)  
 14330 Cultural centre manager  
 81211 Cupola furnaceman  
 29019 Curate  
 26212 Curator, art gallery  
 26212 Curator, museum  
 71149 Curer, concrete  
 75119 Curer, fish  
 75119 Curer, meat  
 43121 Currency sorting machine operator  
 75390 Currier, leather  
 71193 Curtain wall erector  
 42246 Customer contact centre information clerk  
 12220 Customer relations manager (hotel)  
 42245 Customer service clerk  
 12241 Customer service manager  
 33510 Customs inspector  
 33510 Customs officer  
 72249 Cutlery and tool grinder (except machine-tool)  
 71131 Cutter and finisher, stone  
 73132 Cutter and polisher, gem  
 73132 Cutter and polisher, jewel  
 71220 Cutter and setter, mosaic  
 75361 Cutter, clicker (shoemaking)  
 73161 Cutter, crystal glass (decorative)  
 72122 Cutter, flame (metal cutting machine)  
 75321 Cutter, garment  
 73159 Cutter, glass  
 73161 Cutter, glass (crystal)  
 73153 Cutter, glass (optical glass)  
 73161 Cutter, intaglio (glass engraving)  
 75119 Cutter, meat  
 73153 Cutter, optical glass  
 73139 Cutter, precious metal  
 75361 Cutter, shoe  
 75390 Cutter, thread  
 61900 Cutter, timber (forestry)  
 81419 Cutter, tread (tyre making)  
 81419 Cutter, tyre tread  
 81722 Cutter, veneer  
 73161 Cutter-shaper, glass (decorative)  
 81431 Cutting and creasing press operator (paper box)  
 72249 Cutting instrument sharpener  
 81626 Cutting machine operator (sugar confectionery)  
 81220 Cyanide hardener  
 34210 Cycle racer  
 83210 Cyclist, motor (delivery man)  
 81872 Cylinder filler (compressed and liquefied gases)  
 81256 Cylinder honer  
 81841 Cylinder pressman (printing)  
 81872 Cylinder tester (compressed and liquefied gases)  
 21329 Cytogenetist  
 21319 Cytologist  
 32120 Cytotechnician
- D**
- 61210 Dairy farm worker  
 61210 Dairy farmer  
 81622 Dairy product pasteurising machine operator  
 81621 Dairy product processing machine operator (general)  
 31423 Dairy technician  
 26523 Dance band leader  
 59009 Dance hostess  
 36205 Dance Instructor (extracurriculum)

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|-------|--|-------|---|
| 26531 | Dancer                                       | 32511 | Dental nurse, school                    |
| 26531 | Dancer, ballet                               | 32143 | Dental prosthesis maker and<br>repairer |
| 26531 | Dancer, ballroom                             | 32143 | Dental technician                       |
| 26531 | Dancer, chorus                               | 22611 | Dentist, general                        |
| 36205 | Dancing teacher (private tuition)            | 22612 | Dentist, specialised                    |
| 81320 | Darkroom man (black-and-white<br>developing) | 42243 | Dentist's receptionist                  |
| 81320 | Darkroom man (colour<br>developing)          | 32143 | Denturist                               |
| 81320 | Darkroom man (photo printing)                | 11121 | Department head (government)            |
| 25230 | Data communication analyst                   | 14201 | Departmental store manager              |
| 41320 | Data entry clerk                             | 31599 | Depot superintendent, railway           |
| 41320 | Data entry operator                          | 31599 | Depot superintendent, road<br>transport |
| 43151 | Data processing control clerk                | 11121 | Deputy secretary, (government)          |
| 74222 | Data processing equipment fitter             | 22122 | Dermatologist                           |
| 25211 | Database administrator                       | 72159 | Derrick-boat operator                   |
| 25212 | Database architect                           | 81131 | Derrickman (oil and gas wells)          |
| 25212 | Database designer                            | 21445 | Designer, aircraft                      |
| 51702 | Dealer (gaming)                              | 31173 | Designer, automation                    |
| 33112 | Dealer, foreign exchange                     | 34351 | Designer, clothes                       |
| 14203 | Dealer, retail (working proprietor)          | 34352 | Designer, commercial product            |
| 33111 | Dealer, securities                           | 34362 | Designer, computer games                |
| 13459 | Dean (institution of higher<br>learning)     | 34351 | Designer, costume                       |
| 42141 | Debt collector                               | 34351 | Designer, costume (film)                |
| 31522 | Deck officer, ship                           | 34351 | Designer, costume (stage)               |
| 73162 | Decorator (ceramics)                         | 34351 | Designer, costume (studio)              |
| 73162 | Decorator, aerographing<br>(ceramics)        | 25212 | Designer, database                      |
| 73162 | Decorator, freehand painting<br>(ceramics)   | 34351 | Designer, dress                         |
| 34321 | Decorator, interior                          | 21610 | Designer, environmental                 |
| 34324 | Decorator, set (motion pictures)             | 34323 | Designer, exhibition                    |
| 73162 | Decorator, spray painting<br>(ceramics)      | 34351 | Designer, fashion                       |
| 73162 | Decorator-painter, glass                     | 34352 | Designer, furniture                     |
| 81133 | Deep-boring machine operator                 | 34362 | Designer, games                         |
| 62220 | Deep-sea fisherman                           | 34351 | Designer, garment                       |
| 62220 | Deep-sea fishery worker                      | 34361 | Designer, graphic                       |
| 81248 | Degreaser (metal)                            | 34352 | Designer, industrial product            |
| 81619 | Dehydrator, foodstuffs                       | 21529 | Designer, integrated circuit            |
| 26352 | Delinquency prevention social<br>worker      | 34321 | Designer, interior                      |
| 83210 | Delivery man, motor-cycle                    | 34321 | Designer, interior decoration           |
| 52130 | Delivery man, newspaper                      | 34352 | Designer, jewellery                     |
| 21220 | Demographer                                  | 34322 | Designer, landscape                     |
| 71192 | Demolition worker                            | 21446 | Designer, motor car                     |
| 32512 | Dental health therapist                      | 34352 | Designer, package                       |
| 73119 | Dental instrument maker and<br>repairer      | 26543 | Designer, production (film)             |
| 32511 | Dental nurse                                 | 26543 | Designer, production (stage)            |
|       |  | 26543 | Designer, production (studio)           |
|       |  | 34324 | Designer, scenery                       |
|       |  | 34324 | Designer, stage set                     |
|       |  | 25111 | Designer, systems (computer)            |
|       |  | 34352 | Designer, textile                       |
|       |  | 34391 | Designer, typographical                 |

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|-------|--|-------|---|
| 34323 | Designer, window display                               | 81242 | Dipper, tin   |
| 81859 | Desilting basin operator                               | 81242 | Dipper, zinc  |
| 51604 | Despatch worker  | 73162 | Dipping machine attendant<br>(ceramics decorating)              |
| 43219 | Despatching and receiving clerk                        | 81419 | Dipping machine operator, rubber                                |
| 81871 | Desulphurisation treater<br>(petroleum refining)       | 81242 | Dip-plater  |
| 54191 | Detective (private)                                    | 81841 | Direct lithographic pressman                                    |
| 54191 | Detective, house                                       | 73229 | Direct lithographic transferrer                                 |
| 54191 | Detective, store                                       | 26544 | Director of commercials   |
| 21130 | Detergents chemist                                     | 13420 | Director of nursing   |
| 25123 | Developer, computer games                              | 35219 | Director of photography (motion<br>picture)                     |
| 25123 | Developer, multimedia                                  | 26542 | Director, animation   |
| 81320 | Developer, photograph                                  | 26543 | Director, art   |
| 81320 | Developer, photographic film                           | 12212 | Director, business development                                  |
| 81320 | Developer, photographic print                          | 26543 | Director, cinematography  |
| 25121 | Developer, software                                    | 11202 | Director, company   |
| 25122 | Developer, web   | 11202 | Director, executive (company)                                   |
| 81320 | Developer, x-ray film                                  | 51931 | Director, funeral   |
| 81320 | Developing machine operator<br>(motion picture)        | 12211 | Director, international marketing                               |
| 91210 | Dhoby  | 26543 | Director, lighting  |
| 22142 | Diagnostic radiologist                                 | 11201 | Director, managing  |
| 73132 | Diamond polisher, industrial                           | 26542 | Director, motion picture  |
| 73132 | Diamond sawyer, industrial                             | 26529 | Director, music   |
| 72229 | Diamond-pointed tool maker                             | 26523 | Director, music (band)  |
| 81213 | Die casting machine operator                           | 26523 | Director, music (choir)   |
| 72229 | Die finisher   | 26543 | Director, music (concert)                                       |
| 72221 | Die maker  | 26543 | Director, music (film)  |
| 81259 | Die sinking machine operator<br>(metalworking)         | 26523 | Director, music (orchestra)                                     |
| 81259 | Die sinking machine setter-<br>operator (metalworking) | 26543 | Director, music (radio)   |
| 72212 | Die-press operator (forging)                           | 26543 | Director, music (stage)   |
| 73141 | Die-presser, pottery and<br>porcelain                  | 26543 | Director, music (theatre)                                       |
| 72339 | Diesel engine mechanic (except<br>motor vehicle)       | 26543 | Director, music (TV)  |
| 32521 | Dietitian  | 26529 | Director, musical programme                                     |
| 32521 | Dietitian, sports                                      | 26542 | Director, radio   |
| 32521 | Dietitian, therapeutic                                 | 26542 | Director, stage   |
| 81711 | Digester operator                                      | 26542 | Director, television  |
| 93100 | Digger, ditch  | 26542 | Director, theatrical  |
| 96299 | Digger, grave  | 11121 | Director-general  |
| 93100 | Digger, trench   | 34129 | Disability services worker                                      |
| 51312 | Dining car attendant (railway)                         | 34414 | Disc jockey   |
| 51312 | Dining salon steward (ship)                            | 14325 | Discotheque manager   |
| 11121 | Diplomatic representative<br>(government)              | 14201 | Discount store manager  |
| X5000 | Diplomatic representative, foreign                     | 94104 | Dishwasher  |
| 73162 | Dipper (ceramics)                                      | 72339 | Dispensing machine repairer and<br>servicer                     |
| 75212 | Dipper (wood treating)                                 | 32542 | Dispensing optician   |
|       |  | 34323 | Display artist  |
|       |  | 34324 | Display decorator   |
|       |  | 81314 | Distillation operator (chemical<br>processes, except petroleum) |

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|-------|---|-------|---|
| 81871 | Distiller (petroleum refining)              | 31186 | Draughtsman, marine                                 |
| 81314 | Distiller, alcohol                          | 31186 | Draughtsman, marine engineering                     |
| 81314 | Distiller, perfume                          | 31182 | Draughtsman, mechanical                             |
| 81314 | Distiller, turpentine                       | 26112 | Draughtsman, parliamentary                          |
| 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                         |
| 22149 | Doctor (specialised medical practice)       | 31189 | Draughtsperson, geological                          |
| 22149 | 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  |
| 71263 | Drain layer                                 | 81819 | Drawing machine operator, glass                     |
| 26421 | Drama critic                                | 83423 | Dredge operator                                     |
| 36206 | Drama instructor (extracurriculum)          | 83509 | Dredger crewman                                     |
| 36206 | Drama teacher(private tuition)              | 21429 | Dredging engineer                                   |
| 26550 | Dramatic actor                              | 34351 | Dress designer                                      |
| 26411 | Dramatist                                   | 36202 | Dress making teacher (other than vocational school) |
| 31181 | Draughtsman (general)                       | 75119 | Dresser, meat (general)                             |
| 31182 | Draughtsman, aeronautical                   | 75119 | Dresser, poultry                                    |
| 31185 | Draughtsman, architectural                  | 81630 | Dresser, seed (mustard milling)                     |
| 31189 | Draughtsman, cartographical                 | 75119 | Dresser, tripe                                      |
| 31184 | Draughtsman, civil engineering              | 51419 | Dresser, wig  |
| 31183 | Draughtsman, electrical                     | 75310 | Dressmaker  |
| 31183 | Draughtsman, electronics                    | 81312 | Drier operator (chemical and related processes)     |
| 31189 | Draughtsman, geological                     | 81629 | Drier operator (dairy products)                     |
| 31189 | Draughtsman, heating systems                |       |   |
| 31189 | Draughtsman, interior design                |       |   |
| 31182 | Draughtsman, jig, tool and die              |       |   |

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|-------|--|-------|---|
| 81619 | Drier operator (foodstuffs)                        | 83425 | Driver, road roller                       |
| 75211 | Drier, kiln (wood)                                 | 83129 | Driver, shunting-engine                   |
| 81549 | Drier, textile                                     | 83425 | Driver, steam roller                      |
| 81132 | Driller and borer, well (except oil and gas wells) | 83329 | Driver, tanker                            |
| 81131 | Driller, cable (oil and gas wells)                 | 83425 | Driver, tar spreading machine             |
| 73159 | Driller, glass                                     | 83221 | Driver, taxi                              |
| 81139 | Driller, jackhammer (mine and quarry)              | 83322 | Driver, trailer truck                     |
| 73149 | Driller, pottery                                   | 83110 | Driver, train                             |
| 73139 | Driller, precious metal                            | 83421 | Driver, trench digging machine            |
| 81131 | Driller, rotary (oil and gas wells)                | 93310 | Driver, tricycle (not motorised)          |
| 71131 | Driller, stone                                     | 83321 | Driver, truck                             |
| 81132 | Driller, well (except oil and gas)                 | 83223 | Driver, van                               |
| 81132 | Driller, well (water well)                         | 83329 | Driver, water-tank                        |
| 83424 | Drilling machine operator                          | 51950 | Driving instructor                        |
| 81255 | Drilling machine operator (metalworking)           | 51950 | Driving tester                            |
| 81139 | Drilling machine operator (mine and quarry)        | 72212 | Drop forger                               |
| 81255 | Drilling machine setter-operator (metalworking)    | 72219 | Drop-hammer operator                      |
| 94102 | Drinks stall assistant                             | 22621 | Druggist                                  |
| 83324 | Driver, airport mobile equipment                   | 73120 | Drum maker                                |
| 83291 | Driver, ambulance                                  | 26521 | Drummer                                   |
| 83422 | Driver, bulldozer                                  | 81591 | Dry cleaning machine operator             |
| 83311 | Driver, bus  | 31591 | Dry dock master                           |
| 83221 | Driver, cab  | 31591 | Dry dock port master                      |
| 83222 | Driver, car (private service)                      | 75211 | Dry kiln operator                         |
| 83299 | Driver, car delivery                               | 71230 | Dry wall installer                        |
| 83311 | Driver, coach                                      | 75190 | Dryer (tobacco)                           |
| 83425 | Driver, concrete paving machine                    | 81591 | Drying tumbler operator                   |
| 83322 | Driver, container truck                            | 81811 | Dry-kiln operator (brick and tile)        |
| 83429 | Driver, dumper                                     | 81811 | Dry-kiln operator (pottery and porcelain) |
| 83421 | Driver, excavating machine                         | 34413 | Dubbing artiste                           |
| 83323 | Driver, fire engine                                | 35219 | Dubbing machine operator                  |
| 72219 | Driver, forge hammer                               | 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     |
| 83490 | 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                 |
| 83299 | Driver, pick-up                                    | 81542 | Dyer, fabric                              |
| 83223 | Driver, postal van                                 | 81542 | Dyer, garment                             |
| 83322 | Driver, prime mover                                | 81542 | Dyer, hosiery                             |
| 83129 | Driver, railway engine                             | 81542 | Dyer, knitwear                            |
| 83329 | Driver, refuse truck                               | 75390 | Dyer, leather                             |
| 83425 | Driver, road grader and scraper                    | 75390 | Dyer, pelt                                |
|       |  | 81542 | Dyer, textile fibre                       |

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| 81542    | Dyer, yarn                                      | 61221 | Egg producer (farm)   |
| 74129    | Dynamo fitter                                   | 74132 | Electric cable jointer  |
| <b>E</b> |   |       |   |
| 22148    | Ear, nose throat (ENT) surgeon                  | 81390 | Electric cell man   |
| 83426    | Earth boring machine operator<br>(construction) | 74129 | Electric motor fitter   |
| 72339    | Earth moving equipment fitter-<br>assembler     | 74139 | Electric power cableman<br>(underground)                            |
| 72333    | Earth moving equipment<br>mechanic              | 21512 | Electric power engineer   |
| 72339    | Earth-moving equipment fitter                   | 74131 | Electric power lineman  |
| 21332    | Ecologist                                       | 74139 | Electric power lineman<br>(underground)                             |
| 26310    | Econometrician                                  | 74129 | Electric sign assembler and<br>installer                            |
| 21220    | Economics statistician                          | 74131 | Electric traction lineman   |
| 26310    | Economist (general)                             | 82121 | Electrical component assembler                                      |
| 26310    | Economist (specialised)                         | 74129 | Electrical control apparatus fitter                                 |
| 29090    | Economist, home                                 | 31183 | Electrical draughtsman  |
| 81729    | Edge gluer (veneer sheets)                      | 31183 | Electrical draughtsperson   |
| 73159    | Edge grinder, glass                             | 74122 | Electrical elevator and related<br>equipment fitter                 |
| 72242    | Edge tool sharpener                             | 21511 | Electrical engineer (general)                                       |
| 75361    | Edge trimmer (shoe finishing)                   | 21512 | Electrical engineer (power<br>distribution and transmission)        |
| 26416    | Editor, book                                    | 21512 | Electrical engineer (power<br>generation)                           |
| 26422    | Editor, chief (newspaper)                       | 31002 | Electrical engineer, assistant                                      |
| 26415    | Editor, continuity and script                   | 31131 | Electrical engineering technician<br>(general)                      |
| 26422    | Editor, fashion                                 | 31132 | Electrical engineering technician<br>(high voltage)                 |
| 26422    | Editor, feature                                 | 82121 | Electrical equipment assembler                                      |
| 26422    | Editor, financial                               | 74121 | Electrical fitter (general)   |
| 26422    | Editor, foreign                                 | 74129 | Electrical fitter (household<br>appliance)                          |
| 26422    | Editor, news (newspaper)                        | 74129 | Electrical fitter (office machinery)                                |
| 26422    | Editor, news (periodical)                       | 74129 | Electrical fitter (refrigeration and<br>air-conditioning equipment) |
| 26422    | Editor, newspaper                               | 74129 | Electrical fitter (signalling system)                               |
| 26422    | Editor, periodical                              | 74129 | Electrical fitter (transformer)                                     |
| 26422    | Editor, press                                   | 74129 | Electrical household appliance<br>fitter                            |
| 26545    | Editor, radio                                   | 74123 | Electrical household appliance<br>mechanic                          |
| 26545    | Editor, radio, television and video             | 74123 | Electrical household appliance<br>repairer                          |
| 26415    | Editor, script                                  | 74129 | Electrical instrument fitter  |
| 35219    | Editor, sound (motion picture film)             | 74122 | Electrical lift fitter  |
| 26422    | Editor, sports                                  | 74129 | Electrical motor and generator<br>fitter                            |
| 26545    | Editor, television                              | 74129 | Electrical office machinery fitter                                  |
| 26545    | Editor, video                                   | 82131 | Electrical products checker<br>(quality assurance)                  |
| 26422    | Editor-in-chief, newspaper                      |       |   |
| 23511    | Education methods adviser                       |       |   |
| 21220    | Education statistician                          |       |   |
| 23511    | Educational assessment<br>specialist            |       |   |
| 26340    | Educational psychologist                        |       |   |
| 24212    | Efficiency expert, business                     |       |   |

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| 82131 | Electrical products quality checker                            | 82122 | Electronic equipment assembler                             |
| 82131 | Electrical products tester                                     | 74219 | Electronic industrial equipment fitter                     |
| 74129 | Electrical refrigeration and air-conditioning equipment fitter | 74219 | Electronic instrument fitter                               |
| 74123 | Electrical repairer (household appliance)                      | 74219 | Electronic medical equipment fitter                        |
| 74129 | Electrical signalling systems fitter                           | 74219 | Electronic meteorological equipment fitter                 |
| 81860 | Electrical switchboard operator (power station)                | 31195 | Electronic pre-press technician                            |
| 74129 | Electrical switchgear and control apparatus fitter             | 82131 | Electronic products checker (quality assurance)            |
| 74129 | Electrical transformer fitter                                  | 82131 | Electronic products quality checker                        |
| 74123 | Electrician (household electrical equipment)                   | 82131 | Electronic products tester                                 |
| 74110 | Electrician, aircraft  | 74211 | Electronic prototype fitter                                |
| 74110 | Electrician, building  | 74221 | Electronic signalling systems fitter                       |
| 74110 | Electrician, building maintenance                              | 31183 | Electronics draughtsman                                    |
| 74110 | Electrician, installation (building)                           | 31183 | Electronics draughtsperson                                 |
| 74110 | Electrician, locomotive  | 21521 | Electronics engineer (general)                             |
| 74110 | Electrician, maintenance (building)                            | 31003 | Electronics engineer, assistant                            |
| 74110 | Electrician, motor vehicle                                     | 31141 | Electronics engineering technician (general)               |
| 74129 | Electrician, neon-lighting                                     | 74211 | Electronics fitter (general)                               |
| 74110 | Electrician, ship  | 74219 | Electronics fitter (industrial equipment)                  |
| 74110 | Electrician, stage and studio                                  | 74219 | Electronics fitter (instruments)                           |
| 74110 | Electrician, theatre   | 74219 | Electronics fitter (medical equipment)                     |
| 74110 | Electrician, train   | 74219 | Electronics fitter (meteorological equipment)              |
| 74110 | Electrician, vehicle   | 74221 | Electronics fitter (radio, television and radar equipment) |
| 81860 | Electricity generating plant operator (steam)                  | 21110 | Electronics physicist                                      |
| 81860 | Electricity generating switchboard operator                    | 13291 | Electricity power plant manager                            |
| 81860 | Electricity generating turbine operator                        | 81241 | Electroplater  |
| 81860 | Electricity generator operator (private installation)          | 32559 | Electrotherapist   |
| 21110 | Electricity physicist  | 73213 | Electrotype caster   |
| 32119 | Electrocardiograph technician                                  | 73213 | Electrotype moulder  |
| 81312 | Electrode baking furnaceman                                    | 73213 | Electrotyper   |
| 32119 | Electroencephalograph technician                               | 51942 | Elephant trainer   |
| 82122 | Electronic component assembler                                 | 21513 | Elevator engineer  |
| 74222 | Electronic computer and related equipment fitter               | 74122 | Elevator fitter (electrical)                               |
| 35110 | Electronic computer operator (mainframe)                       | 83439 | Elevator operator (material-handling)                      |
| 13304 | Electronic data processing manager                             | 73211 | Elrod casting machine operator (printing)                  |
| 35110 | Electronic data processing supervisor                          | 51932 | Embalmer   |
|       |  | 21526 | Embedded systems engineer                                  |
|       |  | 81843 | Embosser, book (machine)                                   |

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| 81843 | Embossing machine operator, book      | 21453 | Engineer, chemical (petrochemicals)                        |
| 81439 | Embossing machine operator, paper     | 21452 | Engineer, chemical (petroleum)                             |
| 81419 | Embossing machine operator, rubber    | 31511 | Engineer, chief (ship)                                     |
| 75390 | Embroiderer, hand                     | 21421 | Engineer, civil (general)                                  |
| 81532 | Embroiderer, machine                  | 21469 | Engineer, coal mining                                      |
| 81531 | Embroidering machine operator         | 21522 | Engineer, computer hardware                                |
| 22143 | Emergency physician                   | 25121 | Engineer, computer software                                |
| 72249 | Emery polisher (metalworking)         | 21522 | Engineer, computer systems                                 |
| 33330 | Employment agent                      | 21512 | Engineer, distribution (electric power)                    |
| 33330 | Employment contractor                 | 21429 | Engineer, dock and harbour construction                    |
| 24231 | Employment counsellor                 | 21429 | Engineer, dredging   |
| 81629 | Emulsifier (dairy products)           | 21511 | Engineer, electrical (general)                             |
| 73162 | Enameller, ceramic                    | 21512 | Engineer, electrical (power distribution and transmission) |
| 73162 | Enameller, glass                      | 21512 | Engineer, electrical (power generation)                    |
| 73139 | Enameller, jewellery                  | 21521 | Engineer, electronics (general)                            |
| 22129 | Endocrinologist                       | 21513 | Engineer, elevator   |
| 21333 | Energy manager                        | 21526 | Engineer, embedded systems                                 |
| 83129 | Engine driver, railway                | 21431 | Engineer, environmental                                    |
| 81252 | Engine setter-operator (metalworking) | 31512 | Engineer, first (ship)                                     |
| 72311 | Engine tuner                          | 31534 | Engineer, flight   |
| 31511 | Engineer officer, chief (ship)        | 21461 | Engineer, gas (production and distribution)                |
| 31512 | Engineer officer, marine              | 21461 | Engineer, gas (well drilling)                              |
| 31512 | Engineer officer, ship                | 21449 | Engineer, gas turbine                                      |
| 21429 | Engineer, aerodrome construction      | 21522 | Engineer, hardware (computer)                              |
| 21445 | Engineer, aeronautical                | 21429 | Engineer, highway and street construction                  |
| 21499 | Engineer, agricultural                | 21429 | Engineer, hydraulics                                       |
| 21447 | Engineer, air-conditioning            | 21429 | Engineer, hydrographic                                     |
| 25190 | Engineer, artificial intelligence     | 21442 | Engineer, industrial machinery and tools                   |
| 31005 | Engineer, assistant (chemical)        | 25230 | Engineer, infrastructure (IT)                              |
| 31001 | Engineer, assistant (civil)           | 21525 | Engineer, instrumentation                                  |
| 31002 | Engineer, assistant (electrical)      | 21449 | Engineer, internal combustion motor                        |
| 31003 | Engineer, assistant (electronic)      | 21449 | Engineer, jet motor  |
| 31006 | Engineer, assistant (manufacturing)   | 21513 | Engineer, lift   |
| 31004 | Engineer, assistant (mechanical)      | 21449 | Engineer, locomotive (steam)                               |
| 31006 | Engineer, assistant (production)      | 21442 | Engineer, machinery and tools (industrial)                 |
| 31001 | Engineer, assistant (structural)      | 21411 | Engineer, manufacturing (general)                          |
| 21524 | Engineer, audio equipment             | 21443 | Engineer, marine (shore-based)                             |
| 21413 | Engineer, automation                  | 21492 | Engineer, materials  |
| 21446 | Engineer, automotive                  | 21445 | Engineer, mechanical (aeronautical)                        |
| 21491 | Engineer, biomedical                  |       |  |
| 21429 | Engineer, bridge construction         |       |  |
| 21530 | Engineer, broadcast                   |       |  |
| 21423 | Engineer, building construction       |       |  |
| 21529 | Engineer, CAD-CAM                     |       |  |
| 21451 | Engineer, chemical (general)          |       |  |

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| 21446 | Engineer, mechanical (automotive)                             | 25121 | Engineer, software                                  |
| 21441 | Engineer, mechanical (general)                                | 21424 | Engineer, soil mechanics                            |
| 21447 | Engineer, mechanical (heating, ventilation and refrigeration) | 21423 | Engineer, structural (buildings)                    |
| 21442 | Engineer, mechanical (industrial machinery and tools)         | 21422 | Engineer, structural (general)                      |
| 21443 | Engineer, mechanical (marine)                                 | 21522 | Engineer, systems (computer)                        |
| 21449 | Engineer, mechanical (motors and engines, except marine)      | 21530 | Engineer, telecommunications                        |
| 21469 | Engineer, metal-mining  | 21530 | Engineer, telephone                                 |
| 21419 | Engineer, methods   | 21524 | Engineer, television                                |
| 21469 | Engineer, mining (coal)                                       | 31512 | Engineer, third (ship)                              |
| 21469 | Engineer, mining (metal)                                      | 21442 | Engineer, tools and industrial machinery            |
| 21461 | Engineer, mining (petroleum and natural gas)                  | 21519 | Engineer, traction (electric power)                 |
| 21419 | Engineer, motion study  | 21649 | Engineer, traffic                                   |
| 25230 | Engineer, network   | 21512 | Engineer, transmission (electric power)             |
| 21469 | Engineer, non-metalliferous mining                            | 21429 | Engineer, tunnel construction                       |
| 21419 | Engineer, organisation and methods                            | 21524 | Engineer, video equipment                           |
| 21453 | Engineer, petrochemicals                                      | 21419 | Engineer, work study                                |
| 21461 | Engineer, petroleum and natural gas                           | 13291 | Engineering manager                                 |
| 21452 | Engineer, petroleum refining                                  | 33222 | Engineering salesman                                |
| 21424 | Engineer, piling  | 81252 | Engine-lathe operator (metalworking)                |
| 21512 | Engineer, power distribution and transmission                 | 72339 | Engine-room mechanic (ship)                         |
| 21512 | Engineer, power generation                                    | 81829 | Engine-room rating, ship's                          |
| 21499 | Engineer, procurement   | 73161 | Engraver, glass                                     |
| 21412 | Engineer, production  | 73134 | Engraver, jewellery                                 |
| 21414 | Engineer, quality assurance                                   | 73219 | Engraver, metal printing roller                     |
| 21414 | Engineer, quality control                                     | 73219 | Engraver, music printing                            |
| 21529 | Engineer, radar   | 73214 | Engraver, photogravure                              |
| 21524 | Engineer, radio   | 73219 | Engraver, printing (metal plate, roller and die)    |
| 21429 | Engineer, railway construction                                | 73217 | Engraver, printing (photogravure)                   |
| 21447 | Engineer, refrigeration                                       | 73219 | Engraver, printing roller                           |
| 21429 | Engineer, road construction                                   | 73219 | Engraving pantograph operator                       |
| 21449 | Engineer, robotics  | 42249 | Enquiries clerk                                     |
| 21493 | Engineer, safety (industrial)                                 | 21313 | Entomologist  |
| 21432 | Engineer, sanitary  | 43142 | Enumerator  |
| 31512 | Engineer, second (ship)                                       | 81432 | Envelope and paper bag maker                        |
| 21523 | Engineer, semi-conductor                                      | 21431 | Environment engineer                                |
| 21432 | Engineer, sewerage  | 32571 | Environmental health inspector                      |
| 21444 | Engineer, ship construction                                   | 21331 | Environmental officer (environmental protection)    |
| 31512 | Engineer, ship's  | 22632 | Environmental officer (environmental public health) |
| 21519 | Engineer, signal systems (electrical)                         | 22500 | Epidemiologist, veterinary                          |
| 21529 | Engineer, signal systems (electronic)                         | 24131 | Equities analyst                                    |
|       |   | 72335 | Erector and installer, machinery                    |
|       |   | 74221 | Erector, aerial (radio and television)              |
|       |   | 74221 | Erector, antenna (radio and television)             |



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| 61111 | Farm worker, hydroponics             | 61119 | Farmer, vegetable                            |
| 61210 | Farm worker, livestock               | 31423 | Farming technician (livestock and fisheries) |
| 61112 | Farm worker, mushroom                | 31423 | Farming technician (pets)                    |
| 61900 | Farm worker, nutmeg                  | 34351 | Fashion and garment designer                 |
| 62219 | Farm worker, oyster                  | 34391 | Fashion artist                               |
| 61900 | Farm worker, pepper                  | 26422 | Fashion editor                               |
| 61210 | Farm worker, pig                     | 52411 | Fashion model                                |
| 61221 | Farm worker, poultry (general)       | 34310 | Fashion photographer                         |
| 62211 | Farm worker, prawn                   | 26421 | Fashion reporter                             |
| 61900 | Farm worker, rice                    | 34399 | Fashion stylist                              |
| 61900 | Farm worker, rubber                  | 94103 | Fast food preparer                           |
| 61900 | Farm worker, spice                   | 14121 | Fast food restaurant manager                 |
| 61900 | Farm worker, sugar-cane              | 26422 | Feature editor                               |
| 61900 | Farm worker, tobacco                 | 26421 | Feature writer                               |
| 62212 | Farm worker, tropical fish           | 81693 | Feed mixing machine operator                 |
| 61221 | Farmer (battery poultryman)          | 81841 | Feeder, printing press                       |
| 61900 | Farmer (copra)                       | 61900 | Feller (logging)                             |
| 61221 | Farmer (egg producer)                | 75390 | Fellmonger                                   |
| 61900 | Farmer (general)                     | 72142 | Fencing worker                               |
| 61900 | Farmer (mixed farming)               | 81674 | Fermenting room man                          |
| 61132 | Farmer (nursery)                     | 83509 | Ferry boatman                                |
| 61222 | Farmer (poultry hatcher and breeder) | 31599 | Ferry superintendent                         |
| 61900 | Farmer (spice grower)                | 51129 | Ferryboat conductor                          |
| 62212 | Farmer, aquarium fish                | 75390 | Fibre blender                                |
| 61221 | Farmer, chicken                      | 75390 | Fibre carder                                 |
| 61900 | Farmer, coconut                      | 75390 | Fibre comber                                 |
| 61900 | Farmer, corn                         | 81542 | Fibre dyer (textile)                         |
| 62213 | Farmer, crocodile                    | 75390 | Fibre grader and classer                     |
| 61210 | Farmer, dairy                        | 81315 | Fibre maker (synthetic)                      |
| 61221 | Farmer, duck                         | 75390 | Fibre mixer and blender                      |
| 62211 | Farmer, fish                         | 75390 | Fibre preparer                               |
| 61131 | Farmer, flower                       | 75390 | Fibre rover                                  |
| 61900 | Farmer, fruit                        | 75390 | Fibre scourer, wool                          |
| 61221 | Farmer, goose                        | 81812 | Fibreglass maker                             |
| 61900 | Farmer, grain                        | 81142 | Fibro-cement product making machine operator |
| 61900 | Farmer, groundnut                    | 35120 | Field engineer, information technology (IT)  |
| 61210 | Farmer, livestock                    | 43142 | Field investigator (statistical)             |
| 61900 | Farmer, maize                        | 40000 | Field supervisor (market research)           |
| 61112 | Farmer, mushroom                     | 40000 | Field supervisor (statistical)               |
| 61900 | Farmer, nut                          | 41102 | Filing clerk                                 |
| 61131 | Farmer, orchid                       | 81872 | Filler, liquefied petroleum gas (LPG)        |
| 61221 | Farmer, poultry                      | 81872 | Filler, oxygen                               |
| 62211 | Farmer, prawn                        | 26550 | Film actor                                   |
| 61900 | Farmer, rice                         | 81320 | Film and photographic paper maker            |
| 61900 | Farmer, rubber                       | 26421 | Film critic                                  |
| 61900 | Farmer, soya bean                    |       |  |
| 61900 | Farmer, sugar-cane                   |       |  |
| 61900 | Farmer, tobacco                      |       |  |
| 62212 | Farmer, tropical fish                |       |  |
| 61221 | Farmer, turkey                       |       |  |

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| 81320 | Film developer, photographic                               | 31711 | Fire prevention specialist                       |
| 81320 | Film drying machine operator<br>(motion picture)           | 31711 | Fire safety manager                              |
| 81320 | Film maker, photographic                                   | 54110 | Fire salvage specialist                          |
| 81854 | Film operator (water works)                                | 71120 | Firebrick layer                                  |
| 81320 | Film printer   | 54110 | Fireman (aerodrome)                              |
| 59001 | Film projectionist, cinema                                 | 81312 | Fireman (chemical and related<br>processes)      |
| 81313 | Filter press operator                                      | 54110 | Fireman (fire brigade)                           |
| 81819 | Filter press operator, clay                                | 81811 | Fireman, biscuit-kiln (pottery and<br>porcelain) |
| 81313 | Filterer, rotary drum                                      | 81811 | Fireman, biscuit-kiln (tile)                     |
| 43129 | Finance clerk  | 81821 | Fireman, boiler                                  |
| 12111 | Finance manager  | 81811 | Fireman, brick and tile oven                     |
| 21220 | Finance statistician                                       | 81811 | Fireman, glost-kiln (pottery and<br>porcelain)   |
| 24120 | Financial adviser  | 81811 | Fireman, glost-kiln (tile)                       |
| 33219 | Financial adviser (insurance)                              | 81829 | Fireman, locomotive                              |
| 24131 | Financial analyst  | 81672 | Fireman, malt                                    |
| 13460 | Financial and insurance services<br>manager                | 81811 | Fireman, pottery oven                            |
| 12111 | Financial controller                                       | 81829 | Fireman, railway steam engine                    |
| 26422 | Financial editor   | 81822 | Fireman, ship's                                  |
| 33113 | Financial futures broker                                   | 81821 | Fireman, steam boiler                            |
| 33113 | Financial futures dealer                                   | 31512 | First engineer (ship)                            |
| 13460 | Financial institution branch<br>manager                    | 31522 | First mate (ship)                                |
| 33493 | Financial marketing processing<br>and settlement executive | 62212 | Fish breeder, aquarium                           |
| 33493 | Financial markets product control<br>executive             | 75119 | Fish curer                                       |
| 33211 | Financial planner  | 62211 | Fish farm worker                                 |
| 24139 | Financial product structurer                               | 62212 | Fish farm worker, aquarium                       |
| 33225 | Financial products institutional<br>sales representative   | 62212 | Fish farm worker, tropical                       |
| 72249 | Finisher (metal polishing)                                 | 62211 | Fish farmer                                      |
| 81249 | Finisher, casting  | 62211 | Fish hatchery                                    |
| 71143 | Finisher, cement   | 62212 | Fish hatchery worker (aquarium)                  |
| 71143 | Finisher, concrete   | 81694 | Fish meal making machine<br>operator             |
| 72229 | Finisher, die  | 81619 | Fish processing machine<br>operator              |
| 75390 | Finisher, pelt   | 75119 | Fish smoker                                      |
| 73219 | Finisher, photo-engraving                                  | 62220 | Fisherman, deep-sea                              |
| 73219 | Finisher, plastic (photo-<br>engraving)                    | 62220 | Fisherman, inland and coastal<br>waters          |
| 73219 | Finisher, plate (photo-engraving)                          | 62220 | Fisherman, kelong                                |
| 75361 | Finisher, shoe   | 13101 | Fishery manager                                  |
| 75222 | Finisher, wooden furniture                                 | 62220 | Fishery worker, deep-sea                         |
| 31711 | Fire and safety inspector                                  | 51132 | Fishing guide                                    |
| 31711 | Fire and safety officer                                    | 81599 | Fishing net maker                                |
| 83323 | Fire engine driver   | 81139 | Fishing-tool operator (oil and gas<br>wells)     |
| 54110 | Fire fighter (general)                                     | 34223 | Fitness instructor                               |
| 54110 | Fire fighter, aircraft accident                            | 72339 | Fitter, agricultural machinery                   |
| 54110 | Fire fighter, harbour                                      | 72322 | Fitter, aircraft engine                          |
| 54110 | Fire investigator  | 71262 | Fitter, aircraft pipe and tube                   |

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| 32141 | Fitter, artificial limb   | 71262 | Fitter, gas pipe   |
| 74222 | Fitter, computer and related equipment                            | 74129 | Fitter, generator  |
| 74222 | Fitter, data processing equipment                                 | 72339 | Fitter, industrial machinery   |
| 74129 | Fitter, dynamo  | 72339 | Fitter, internal combustion engine (except aircraft and marine engine)           |
| 72339 | Fitter, earthmoving equipment                                     | 72332 | Fitter, machinery (general)  |
| 74129 | Fitter, electric motor  | 72339 | Fitter, maintenance  |
| 74121 | Fitter, electrical (general)                                      | 72334 | Fitter, marine engine  |
| 74129 | Fitter, electrical (household appliance)                          | 72339 | Fitter, metalworking machine-tool  |
| 74129 | Fitter, electrical (office machinery)                             | 74219 | Fitter, meteorological electronic equipment                                      |
| 74129 | Fitter, electrical (refrigeration and air-conditioning equipment) | 72311 | Fitter, motor vehicle  |
| 74129 | Fitter, electrical (signalling systems)                           | 72339 | Fitter, office machinery   |
| 74129 | Fitter, electrical (transformer)                                  | 71262 | Fitter, pipe (gas)   |
| 74129 | Fitter, electrical control apparatus                              | 71262 | Fitter, pipe (general)   |
| 74122 | Fitter, electrical elevator and related equipment                 | 71262 | Fitter, pipe (marine)  |
| 74129 | Fitter, electrical household appliance                            | 71262 | Fitter, pipe (steam)   |
| 74129 | Fitter, electrical instrument                                     | 71262 | Fitter, pipe tube (aircraft)   |
| 74122 | Fitter, electrical lift   | 71250 | Fitter, plate glass  |
| 74129 | Fitter, electrical motor and generator                            | 72339 | Fitter, printing machinery   |
| 74129 | Fitter, electrical office machinery                               | 74221 | Fitter, radar  |
| 74129 | Fitter, electrical refrigeration and air-conditioning equipment   | 74221 | Fitter, radio transmitter  |
| 74129 | Fitter, electrical signalling systems                             | 74129 | Fitter, rheostat   |
| 74129 | Fitter, electrical switchgear and control apparatus               | 74129 | Fitter, signalling equipment (electrical)  |
| 74129 | Fitter, electrical transformer                                    | 74221 | Fitter, signalling equipment (electronic)  |
| 74222 | Fitter, electronic computer and related equipment                 | 75361 | Fitter, sole   |
| 74219 | Fitter, electronic instruments                                    | 74129 | Fitter, switchgear (electrical)  |
| 74211 | Fitter, electronic prototype                                      | 74221 | Fitter, television transmitter   |
| 74221 | Fitter, electronic signalling systems                             | 72339 | Fitter, textile machinery  |
| 74211 | Fitter, electronics (general)                                     | 74129 | Fitter, transformer  |
| 74219 | Fitter, electronics (industrial equipment)                        | 72339 | Fitter, turbine (except aircraft and marine turbine)                             |
| 74219 | Fitter, electronics (medical equipment)                           | 72339 | Fitter, woodworking machinery  |
| 74219 | Fitter, electronics (meteorological equipment)                    | 72339 | Fitter-assembler, agricultural machinery   |
| 74221 | Fitter, electronics (radio, television and radar equipment)       | 72322 | Fitter-assembler, aircraft engine  |
| 74122 | Fitter, elevator (electrical)                                     | 72339 | Fitter-assembler, earth-moving equipment   |
| 74122 | Fitter, escalator   | 72339 | Fitter-assembler, internal combustion engine (except aircraft and marine engine) |
|       |   | 72332 | Fitter-assembler, machinery (general)  |
|       |   | 72334 | Fitter-assembler, marine engine  |
|       |   | 72339 | Fitter-assembler, metalworking machine-tool                                      |
|       |   | 72339 | Fitter-assembler, office machinery   |

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| 72339 | Fitter-assembler, printing machinery                           | 75159 | Food taster  |
| 72339 | Fitter-assembler, textile machinery                            | 31412 | Food technician  |
| 72339 | Fitter-assembler, turbine (except aircraft and marine turbine) | 21130 | Food toxicologist  |
| 72339 | Fitter-assembler, woodworking machinery                        | 81659 | Foodstuffs dehydrator  |
| 71151 | Fixer (carpenter)  | 81619 | Foodstuffs freezer   |
| 71199 | Fixer, prefabricated building section                          | 51491 | Foot reflexologist   |
| 72122 | Flame cutter   | 34210 | Football player  |
| 72122 | Flame cutter (metal cutting machine)                           | 75361 | Footwear maker   |
| 26521 | Flautist   | 75362 | Footwear maker, orthopaedic  |
| 75190 | Flavourer, tobacco   | 75363 | Footwear repairer  |
| 31534 | Flight engineer  | X5000 | Foreign ambassador   |
| 31533 | Flight navigator   | X4000 | Foreign armed forces   |
| 31594 | Flight operations officer                                      | X5000 | Foreign consular general   |
| 35234 | Flight radio operator  | X5000 | Foreign consular official  |
| 51112 | Flight steward   | X5000 | Foreign diplomatic representative                                    |
| 81819 | Float glass bath operator                                      | 26422 | Foreign editor   |
| 83431 | Floating crane operator  | 33112 | Foreign exchange broker  |
| 71220 | Floor layer (composition tiles)                                | 33112 | Foreign exchange dealer  |
| 71220 | Floor layer, parquetry   | 81000 | Foreman, general (beverage making)                                   |
| 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)           |
| 31535 | 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)                   |
| 21496 | Food and drink technologist                                    | 73000 | Foreman, general (glass products manufacturing)                      |
| 51390 | Food checker (catering service)                                |       |  |
| 21130 | Food chemist   |       |  |
| 75159 | Food grader  |       |  |
| 75190 | Food pickler   |       |  |
| 31412 | Food processing technician                                     |       |  |
| 31412 | Food production technician                                     |       |  |
| 31412 | Food science technician  |       |  |
| 94102 | Food stall assistant   |       |  |

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| 73000 | Foreman, general (jewellery manufacturing)   | 54199 | Forest supervisor                              |
| 75000 | Foreman, general (leather goods making)  | 61900 | Forestry logger                                |
| 72000 | Foreman, general (metal and machinery trades)  | 61900 | Forestry worker                                |
| 81000 | Foreman, general (metal processing)  | 72219 | Forge hammer driver                            |
| 81000 | Foreman, general (metal smelting, converting and refining)                           | 72219 | Forge hammersmith                              |
| 72000 | Foreman, general (non-electrical /non-electronic machinery manufacturing and repair) | 72212 | Forging-press operator                         |
| 81000 | Foreman, general (paper products manufacturing)                                      | 83441 | Fork lift truck operator                       |
| 81000 | Foreman, general (papermaking)   | 81314 | Formic acid plant operator                     |
| 81000 | Foreman, general (petroleum refining)  | 81432 | Forming press operator (cardboard article)     |
| 81000 | Foreman, general (plastic products manufacturing)                                    | 51910 | Fortune teller                                 |
| 71000 | Foreman, general (plumbing installation and repair)                                  | 33311 | Forwarding agent                               |
| 73000 | Foreman, general (pottery and bricks manufacturing)                                  | 21462 | Foundry metallurgist                           |
| 73000 | Foreman, general (precision instrument manufacturing)                                | 31193 | Foundry technician                             |
| 81000 | Foreman, general (prefabrication components manufacturing)                           | 75223 | Frame maker, picture                           |
| 81000 | Foreman, general (printing)  | 81511 | Frame operator, spinning (thread and yarn)     |
| 81000 | Foreman, general (rubber products manufacturing)                                     | 81732 | Frame precision sawyer (wood)                  |
| 72000 | Foreman, general (ship building and repairing)                                       | 81855 | Freezer operator                               |
| 75000 | Foreman, general (shoemaking)  | 81629 | Freezer operator (dairy products)              |
| 81000 | Foreman, general (synthetic material products manufacturing)                         | 81619 | Freezer, foodstuffs                            |
| 81000 | Foreman, general (textile fibre processing and textile manufacturing)                | 43219 | Freight receiving clerk                        |
| 75000 | Foreman, general (tobacco products manufacturing)                                    | 13243 | Freight traffic department manager             |
| 81000 | Foreman, general (water supply)  | 81732 | Fret-saw operator                              |
| 81000 | Foreman, general (well drilling)   | 81522 | Fringing machine operator                      |
| 81000 | Foreman, general (wood products making)  | 81819 | Frit kilnman                                   |
| 72000 | Foreman, shipyard  | 59009 | Frogman (salvage)                              |
| 22146 | Forensic pathologist   | 42242 | Front office executive                         |
| 26340 | Forensic psychologist  | 14111 | Front office manager (hotel)                   |
| 31199 | Forensic science technician  | 73161 | Froster (glass sandblasting)                   |
| 54199 | Forest patrolman   | 81619 | Froster operator (food freezing)               |
| 54199 | Forest ranger  | 61900 | Fruit farm worker                              |
|       |  | 61900 | Fruit farmer                                   |
|       |  | 75190 | Fruit pickler                                  |
|       |  | 75190 | Fruit preserver                                |
|       |  | 81651 | Fruit press operator                           |
|       |  | 75401 | Fumigator                                      |
|       |  | 33493 | Fund administration executive                  |
|       |  | 33221 | Fund management business development executive |
|       |  | 24133 | Fund manager                                   |
|       |  | 33493 | Fund performance measurement executive         |
|       |  | 51931 | Funeral director                               |
|       |  | 96259 | Fun-fair attendant                             |
|       |  | 75390 | Fur sewer                                      |
|       |  | 75390 | Fur tailor                                     |
|       |  | 81219 | Furnace charger (metal melting and reheating)  |



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|-------|--|-------|--|
| 73132 | Gem cutter and polisher  | 81000 | General foreman (petroleum refining)                                 |
| 73132 | Gem setter   | 81000 | General foreman (plastic products manufacturing)                     |
| 26339 | Genealogist  | 71000 | General foreman (plumbing installation and repair)                   |
| 81000 | General foreman (beverage making)  | 73000 | General foreman (pottery and bricks manufacturing)                   |
| 71000 | General foreman (building trades)  | 73000 | General foreman (precision instrument manufacturing)                 |
| 71000 | General foreman (building)   | 81000 | General foreman (prefabrication components manufacturing)            |
| 73000 | General foreman (ceramics manufacturing)   | 81000 | General foreman (printing)   |
| 81000 | General foreman (chemical processing)  | 81000 | General foreman (rubber products manufacturing)                      |
| 81000 | General foreman (chemical products manufacturing)                                  | 72000 | General foreman (ship building and repairing)                        |
| 81000 | General foreman (clothing manufacturing)   | 75000 | General foreman (shoemaking)   |
| 71000 | General foreman (construction)   | 81000 | General foreman (synthetic material products manufacturing)          |
| 74000 | General foreman (electrical and electronic installation and repair)                | 81000 | General foreman (textile fibre processing and textile manufacturing) |
| 82000 | General foreman (electrical equipment manufacturing and repairing)                 | 75000 | General foreman (tobacco products manufacturing)                     |
| 81000 | General foreman (electricity generation and distribution)                          | 81000 | General foreman (water supply)                                       |
| 82000 | General foreman (electronic equipment manufacturing and repairing)                 | 81000 | General foreman (well drilling)                                      |
| 81000 | General foreman (food manufacturing)   | 81000 | General foreman (wood processing)                                    |
| 81000 | General foreman (furniture and related products manufacturing)                     | 81000 | General foreman (wood products making)                               |
| 81000 | General foreman (gas production and distribution)                                  | 33493 | General insurance claims processing executive                        |
| 73000 | General foreman (glass products manufacturing)                                     | 43111 | General ledger bookkeeper  |
| 73000 | General foreman (jewellery manufacturing)  | 11203 | General manager (agriculture)  |
| 75000 | General foreman (leather goods making)   | 11203 | General manager (construction)                                       |
| 72000 | General foreman (metal and machinery trades)                                       | 11203 | General manager (hotel)  |
| 81000 | General foreman (metal processing)   | 11203 | General manager (manufacturing)                                      |
| 81000 | General foreman (metal smelting, converting and refining)                          | 11203 | General manager (mining and quarrying)                               |
| 72000 | General foreman (non-electrical/non-electronic machinery manufacturing and repair) | 11203 | General manager (restaurant)   |
| 81000 | General foreman (paper products manufacturing)                                     | 11203 | General manager (retail trade)                                       |
| 81000 | General foreman (papermaking)  | 11203 | General manager (service firm)                                       |
|       |  | 11122 | General manager (statutory board)                                    |
|       |  | 11203 | General manager (transport)  |
|       |  | 11203 | General manager (wholesale trade)                                    |
|       |  | 41101 | General office clerk   |

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|-------|---|-------|---|
| 40000 | General office supervisor                         | 71250 | Glass installer (vehicles)                    |
| 22110 | General physician                                 | 81811 | Glass kiln operator                           |
| 22110 | General practitioner                              | 81819 | Glass lathe operator                          |
| 11150 | General secretary of labour union                 | 73152 | Glass lens moulder                            |
| 22131 | General surgeon                                   | 81811 | Glass making furnaceman                       |
| 81860 | Generating plant operator<br>(hydroelectric)      | 81819 | Glass mixer                                   |
| 81860 | Generating plant operator<br>(steam)              | 81819 | Glass moulding machine operator               |
| 74129 | Generator fitter                                  | 73162 | Glass painter                                 |
| 81860 | Generator switchboard operator<br>(power station) | 73159 | Glass plate rollerman                         |
| 21349 | Geneticist  | 81819 | Glass pressing machine operator               |
| 21345 | Geneticist, animal                                | 73159 | Glass rod maker                               |
| 21329 | Geneticist, plant                                 | 73161 | Glass sandblaster                             |
| 21142 | Geodesist   | 71250 | Glass setter (building)                       |
| 21142 | Geodesist surveyor                                | 73162 | Glass silverer                                |
| 21652 | Geodetic surveyor                                 | 21495 | Glass technologist                            |
| 26339 | Geographer  | 81811 | Glass temperer                                |
| 31189 | Geological draughtsman                            | 73159 | Glass tube bender                             |
| 31189 | Geological draughtsperson                         | 73159 | Glass tube drawer                             |
| 21141 | Geological oceanographer                          | 73159 | Glass tube maker                              |
| 21141 | Geologist   | 81812 | Glass-fibre maker                             |
| 31119 | Geology technician                                | 81819 | Glaze grinder                                 |
| 21142 | Geomagnetician                                    | 81819 | Glaze maker                                   |
| 21141 | Geomorphologist                                   | 81819 | Glaze mixer                                   |
| 21142 | Geophysical oceanographer                         | 73162 | Glazer, ceramic                               |
| 21142 | Geophysicist                                      | 71250 | Glazier                                       |
| 22129 | Geriatrician                                      | 71250 | Glazier, building                             |
| 81671 | Germination worker (malting)                      | 71250 | Glazier, roofing                              |
| 81653 | Gingili miller                                    | 71250 | Glazier, structural                           |
| 81811 | Glass annealing furnaceman                        | 71250 | Glazier, vehicle                              |
| 73159 | Glass beveller                                    | 81811 | Glost-kiln fireman (pottery and<br>porcelain) |
| 73151 | Glass blower                                      | 81811 | Glost-kiln fireman (tile)                     |
| 73151 | Glass blower (scientific glass)                   | 75329 | Glove cutter                                  |
| 81819 | Glass blowing machine operator                    | 81723 | Glue spreader, veneer                         |
| 21130 | Glass chemist                                     | 81729 | Gluer, edge (veneer sheets)                   |
| 73159 | Glass cutter                                      | 81723 | Gluer, veneer sheet                           |
| 73161 | Glass cutter (crystal)                            | 93334 | Godown labourer                               |
| 73153 | Glass cutter (optical glass)                      | 73139 | Gold beater                                   |
| 73161 | Glass cutter-shaper (decorative)                  | 73133 | Goldsmith                                     |
| 73162 | Glass decorator-painter                           | 96259 | Golf caddie                                   |
| 81819 | Glass drawing machine operator                    | 34221 | Golf teacher                                  |
| 73159 | Glass driller                                     | 34210 | Golfer  |
| 73159 | Glass edge grinder                                | 33311 | Goods agent (railway)                         |
| 73162 | Glass enameller                                   | 81830 | Goods branding machine<br>operator            |
| 73161 | Glass engraver                                    | 93333 | Goods loader (aircraft)                       |
| 73161 | Glass etcher                                      | 93332 | Goods loader (lorry)                          |
| 81819 | Glass float bath operator                         | 93332 | Goods loader (railway and road<br>vehicles)   |
| 73159 | Glass grinder (laboratory<br>apparatus)           | 81830 | Goods marking machine operator                |
|       |   | 61221 | Goose farmer                                  |



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|-------|---|-------|--|
| 51419 | Hair consultant                                     | 53201 | Healthcare assistant                             |
| 51419 | Hair therapist                                      | 21110 | Heat physicist                                   |
| 51412 | Hairdresser, men's                                  | 72149 | Heater, rivet                                    |
| 51411 | Hairdresser, women's                                | 81859 | Heating and ventilation<br>equipment operator    |
| 51411 | Hairstylist   | 31189 | Heating systems draughtsman                      |
| 96212 | Hall porter (hotel)                                 | 31189 | Heating systems draughtsperson                   |
| 72219 | Hammer driver, forge                                | 75361 | Heel builder (shoe)                              |
| 72219 | Hammerman (forging)                                 | 31532 | Helicopter pilot (air transport)                 |
| 73139 | Hammerman (precious metal<br>article)               | 81420 | Helmet maker (plastic)                           |
| 81630 | Hammer-mill operator (grain<br>milling)             | 83501 | Helmsman   |
| 81630 | Hammer-mill operator (rice<br>milling)              | 32300 | Herbalist  |
| 81630 | Hammer-mill operator (spice<br>milling)             | 31419 | Herbarium technician                             |
| 72219 | Hammersmith   | 11121 | High commissioner (government)                   |
| 72219 | Hammersmith (forging)                               | 26120 | High court judge                                 |
| 75390 | Hand embroiderer                                    | 21429 | Highway and street construction<br>engineer      |
| 75390 | Hand knitter  | 71329 | Highway lane marker                              |
| 93201 | Hand packer   | 54121 | Highway patrolman                                |
| 22133 | Hand surgeon  | 34424 | High-wire artiste                                |
| 75390 | Hand tufter (carpet weaving)                        | 21313 | Histologist, animal                              |
| 93201 | Hand wrapper  | 21312 | Histologist, plant                               |
| 71331 | Handyman, building maintenance                      | 22146 | Histopathologist                                 |
| 71312 | Hanger, wallpaper                                   | 26331 | Historian  |
| 54110 | Harbour fire fighter                                | 83431 | Hoist operator (construction)                    |
| 31523 | Harbour pilot                                       | 83431 | Hoist operator (mine)                            |
| 54121 | Harbour policeman                                   | 72153 | Hoisting equipment rigger<br>(construction)      |
| 81220 | Hardener, case                                      | 72151 | Hoisting equipment rigger<br>(general)           |
| 81220 | Hardener, cyanide                                   | 53209 | Home care aide                                   |
| 21522 | Hardware engineer (computer)                        | 91301 | Home care worker                                 |
| 81531 | Hat and cap sewer (machine)                         | 29090 | Home economist                                   |
| 75299 | Hat maker, straw                                    | 53209 | Home health aide                                 |
| 61222 | Hatcher and breeder, poultry                        | 53114 | Home parent                                      |
| 62211 | Hatcher, fish                                       | 32300 | Homeopath  |
| 62212 | Hatchery worker, fish (aquarium)                    | 81629 | Homogeniser operator (dairy<br>products)         |
| 61222 | Hatchery worker, poultry                            | 81256 | Honing machine operator<br>(metalworking)        |
| 52110 | Hawker (excluding prepared food<br>or drinks)       | 81256 | Honing machine setter-operator<br>(metalworking) |
| 52120 | Hawker (prepared food or drinks)                    | 51944 | Horse trainer                                    |
| 94102 | Hawker assistant (prepared food<br>or drinks)       | 31421 | Horticultural technical officer                  |
| 32571 | Hawker inspector (government)                       | 31421 | Horticultural technician                         |
| 94102 | Hawker stall assistant (prepared<br>food or drinks) | 21322 | Horticulturist                                   |
| 51311 | Head waiter   | 81419 | Hose maker                                       |
| 32300 | Healer (drugless treatment)                         | 81542 | Hosiery dyer                                     |
| 32300 | Healer, faith                                       | 81522 | Hosiery knitting machine operator                |
| 13420 | Health services manager                             | 42290 | Hospital admissions clerk                        |
| 21220 | Health statistician                                 | 96253 | Hospital aid                                     |

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| 96253 | Hospital attendant                               | 12121 | Human resource manager                      |
| 96253 | Hospital orderly                                 | 33461 | Human resource officer                      |
| 22621 | Hospital pharmacist                              | 51132 | Hunting guide                               |
| 96253 | Hospital servant                                 | 81630 | Husking machine operator (grain milling)    |
| 42242 | Hospitality services executive                   | 72321 | Hydraulic systems mechanic (aircraft)       |
| 14111 | Hostel manager                                   | 21429 | Hydraulics engineer                         |
| 51112 | Hostess, air (aircrew)                           | 21319 | Hydrobiologist                              |
| 42244 | Hostess, air (ground)                            | 21110 | Hydrodynamicist                             |
| 51112 | Hostess, aircraft                                | 81860 | Hydroelectric station operator              |
| 42244 | Hostess, airport                                 | 81319 | Hydrogen gas maker                          |
| 51330 | Hostess, bar                                     | 81654 | Hydrogenation operator (oils and fats)      |
| 59009 | Hostess, dance                                   | 21429 | Hydrographic engineer                       |
| 42244 | Hostess, ground (airport)                        | 21653 | Hydrographic surveyor                       |
| 51330 | Hostess, lounge                                  | 21142 | Hydrologist                                 |
| 51330 | Hostess, night club                              | 21120 | Hydrometeorologist                          |
| 81242 | Hot-dip plater                                   | 61111 | Hydroponic farm worker                      |
| 96212 | Hotel baggage porter                             | 32512 | Hygienist, oral                             |
| 91122 | Hotel cleaner                                    | 34429 | Hypnotist                                   |
| 96211 | Hotel concierge                                  |       |   |
| 51202 | Hotel cook                                       |       |   |
| 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)                     |       |   |
| 96259 | Hot-room attendant (bath)                        |       |   |
| 33340 | House agent                                      | 81692 | Ice making machine operator                 |
| 54191 | House detective                                  | 81624 | Ice-cream making machine operator           |
| 71311 | House painter                                    | 21313 | Ichthyologist                               |
| 53114 | House parent                                     | 21519 | Illumination engineer                       |
| 51502 | House steward                                    | 34422 | Illusionist                                 |
| 74123 | Household appliance repairer, electrical         | 34391 | Illustrator, advertising                    |
| 51501 | Housekeeper (except private service)             | 34391 | Illustrator, book                           |
| 51501 | Housekeeper (hotels and other establishments)    | 34391 | Illustrator, commercial                     |
| 51509 | Housekeeper (private service)                    | 29011 | Imam  |
| 91121 | Housekeeping attendant                           | 33510 | Immigration officer                         |
| 51503 | Housekeeping matron                              | 26550 | Impersonator                                |
| 51501 | Housekeeping supervisor (except private service) | 14204 | Importer (working proprietor)               |
| 91301 | Housemaid  | 73211 | Imposer (printing)                          |
| 31719 | Housing maintenance inspector                    | 81712 | Impregnating machine operator (papermaking) |
| 51129 | Hovercraft conductor                             | 81419 | Impregnating machine operator (rubber)      |
| 31529 | Hovercraft pilot                                 | 75212 | Impregnator (wood treating)                 |
| 41103 | Human resource clerk                             | 26541 | Impresario                                  |
| 24231 | Human resource consultant                        | 13291 | Incinerator plant manager                   |
| 33461 | Human resource development officer               | 81859 | Incinerator plant operator                  |
|       |  | 61222 | Incubator operator                          |
|       |  | 44110 | Index clerk (library)                       |

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| 73132 | Industrial diamond cutter and polisher                         | 42249 | Inquiries clerk   |
| 54192 | Industrial investigator  | 61210 | Inseminator, artificial (livestock)                     |
| 82121 | Industrial machine assembler (electrical)                      | 61223 | Inseminator, artificial (poultry)                       |
| 21442 | Industrial machinery and tools engineer                        | 51601 | Inspector of postmen                                    |
| 72339 | Industrial machinery fitter                                    | 33510 | Inspector, border                                       |
| 72333 | Industrial machinery mechanic                                  | 34129 | Inspector, child care                                   |
| 32201 | Industrial nurse   | 33152 | Inspector, claims                                       |
| 22629 | Industrial pharmacist  | 31129 | Inspector, construction                                 |
| 34310 | Industrial photographer  | 33510 | Inspector, customs                                      |
| 22149 | Industrial physician   | 32571 | Inspector, environmental health                         |
| 81000 | Industrial plant supervisor and general foreman                | 31720 | Inspector, factory (occupational safety)                |
| 34352 | Industrial product designer                                    | 31720 | Inspector, machinery (government)                       |
| 26340 | Industrial psychologist  | 32572 | Inspector, occupational health                          |
| 12122 | Industrial relations manager                                   | 33550 | Inspector, police                                       |
| 33462 | Industrial relations officer                                   | 33599 | Inspector, price  |
| 81880 | Industrial robot operator                                      | 31579 | Inspector, railway transport service                    |
| 21493 | Industrial safety engineer                                     | 31573 | Inspector, road passenger transport service             |
| 83449 | Industrial truck operator                                      | 32571 | Inspector, sanitary                                     |
| 53113 | Infant care assistant  | 33591 | Inspector, taxation                                     |
| 22129 | Infectious diseases physician                                  | 51122 | Inspector, ticket                                       |
| 33224 | Information and communications technology sales representative | 31573 | Inspector, traffic (passenger road transport service)   |
| 42249 | Information clerk  | 31579 | Inspector, traffic (railway)                            |
| 13301 | Information systems manager                                    | 31573 | Inspector, transport service (buses and trams)          |
| 35120 | Information technology (IT) field engineer                     | 31720 | Inspector, vehicle (government)                         |
| 33222 | Information technology (IT) marketing representative           | 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                      |
| 81420 | Injection moulding machine operator, plastics                  | 33225 | Institutional sales representative, financial           |
| 62220 | Inland and coastal waters fisherman                            | 34223 | Instructor, aerobics                                    |
| 14112 | Innkeeper (working proprietor)                                 | 36202 | Instructor, art (extracurriculum)                       |
|       |  | 36205 | Instructor, dance (private tuition)                     |
|       |  | 36206 | Instructor, drama (extracurriculum)                     |





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| 96252 | Laboratory attendant                              | 81252 | Lathe operator (metalworking)                              |
| 31411 | Laboratory technician (biology)                   | 81819 | Lathe operator, glass                                      |
| 31111 | Laboratory technician (chemistry)                 | 81149 | Lathe operator, stone                                      |
| 31112 | Laboratory technician (physics)                   | 81722 | Lathe operator, veneer cutting                             |
| 32120 | Laboratory technician, medical                    | 81739 | Lathe operator, wood turning                               |
| 33462 | Labour conciliator                                | 81252 | Lathe setter-operator                                      |
| 33330 | Labour contractor                                 | 81739 | Lathe setter-operator<br>(woodworking)                     |
| 33599 | Labour inspector (government)                     | 91210 | Lauderer (except private<br>service)                       |
| 33462 | Labour management relations<br>conciliator        | 81591 | Laundering machine operator                                |
| 93100 | Labourer (construction)                           | 91302 | Laundress (private service)                                |
| 96293 | Labourer (general)                                | 91210 | Laundry and dry cleaning worker<br>(manual, non-household) |
| 93209 | Labourer (manufacturing)                          | 81591 | Laundry press machine operator                             |
| 92190 | Labourer, farm                                    | 91210 | Laundry worker (hotel)                                     |
| 93100 | Labourer, road maintenance                        | 96259 | Lavatory attendant   |
| 93209 | Labourer, smokehouse (rubber)                     | 44170 | Law clerk  |
| 75229 | Ladder maker (wood)                               | 26112 | Lawyer (except advocate and<br>solicitor)                  |
| 51411 | Ladies' hairdresser                               | 26111 | Lawyer, civil  |
| 81819 | Laminated glass worker                            | 26111 | Lawyer, criminal   |
| 81719 | Laminating machine operator<br>(papermaking)      | 71290 | Layer, carpet  |
| 81420 | Laminating machine operator,<br>plastics          | 71263 | Layer, drain   |
| 81412 | Laminating machine operator,<br>rubber            | 71120 | Layer, firebrick   |
| 81420 | Laminator, plastics                               | 71263 | Layer, mains   |
| 31124 | Land surveying technician                         | 71263 | Layer, pipe  |
| 21652 | Land surveyor                                     | 71220 | Layer, tile (composition tiles)                            |
| 21620 | Landscape architect                               | 92149 | Layer, turf  |
| 21620 | Landscape artist                                  | 71220 | Layer, wood block floor                                    |
| 34322 | Landscape designer                                | 39910 | Layworker  |
| 12192 | Landscape operations manager                      | 81871 | Lead blender (petroleum refining)                          |
| 31719 | Landscape safety inspector                        | 81319 | Lead oxide maker   |
| 31719 | Landscape safety officer                          | 26523 | Leader, band   |
| 92149 | Landscape worker                                  | 26523 | Leader, dance band   |
| 36201 | Language instructor<br>(extracurriculum)          | 34129 | Leader, youth  |
| 36201 | Language school teacher                           | 75190 | Leaf conditioner (tobacco)                                 |
| 36201 | Language teacher (language<br>school)             | 73139 | Leaf maker, precious metal                                 |
| 32532 | Language therapist                                | 96291 | Leaflet and newspaper deliverer                            |
| 81259 | Lapping machine operator<br>(metalworking)        | 96291 | Leaflet and newspaper distributor                          |
| 81259 | Lapping machine setter-operator<br>(metalworking) | 21130 | Leather chemist  |
| 75361 | Lasting machine operator<br>(shoemaking)          | 75390 | Leather carrier  |
| 81259 | Lathe operator (metal spinning)                   | 75390 | Leather dyer   |
|       |   | 75390 | Leather dyer and stainer                                   |
|       |   | 75364 | Leather goods assembler                                    |
|       |   | 75364 | Leather goods maker  |
|       |   | 75364 | Leather sewer  |
|       |   | 75390 | Leather tanner   |
|       |   | 23102 | Lecturer, polytechnic                                      |
|       |   | 23101 | Lecturer, university                                       |
|       |   | 43112 | Ledger clerk   |

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|-------|---|-------|--|
| 44170 | Legal clerk                                       | 81679 | Liqueur maker                              |
| 26113 | Legal officer                                     | 75159 | Liquor taster                              |
| 11110 | Legislator (national government)                  | 33399 | Literary agent                             |
| 14329 | Leisure centre manager                            | 26421 | Literary critic                            |
| 73154 | Lens grinding machine operator                    | 34391 | 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                                | 31596 | Load-sheet officer (aircraft)              |
| 33493 | 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 | Ligherman   | 14111 | Lodging house manager                      |
| 96269 | Lighthouse keeper                                 | 81711 | Log chipper (machine)                      |
| 96269 | Lighthouse man                                    | 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         |
| 81522 | Link and link-knitting machine operator (garment) | 81859 | Lubricator (except ship's engines)         |
| 73211 | Linotype operator                                 | 73211 | Ludlow casting machine operator (printing) |
| 34429 | Lion tamer  | 75211 | Lumber kiln operator                       |
| 81319 | Liquefaction plant operator (liquefied gases)     | 61900 | Lumberjack                                 |
| 81872 | Liquefied petroleum gas (LPG) filler              | 26419 | Lyric writer                               |

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|-------|---|-------|---|
| 81642 | Macaroni making machine operator                            | 81830 | Machine operator, boxing (packing)            |
| 81642 | Macaroni, noodle and vermicelli maker                       | 81599 | Machine operator, braid making                |
| 73162 | Machine attendant, dipping (ceramics decorating)            | 73211 | Machine operator, braille (plate preparer)    |
| 31155 | Machine building specialist                                 | 72241 | Machine operator, buffing and polishing       |
| 81532 | Machine embroiderer   | 81623 | Machine operator, butter making               |
| 81830 | Machine labeller  | 81319 | Machine operator, candle making               |
| 81142 | Machine operator, asbestos cement product                   | 81830 | Machine operator, capping and sealing         |
| 83425 | Machine operator, asphalt spreading                         | 81719 | Machine operator, carbon coding (papermaking) |
| 81259 | Machine operator, automatic transfer (metalworking)         | 81432 | Machine operator, cardboard lining            |
| 81712 | Machine operator, back-end (papermaking)                    | 81739 | Machine operator, carving (woodworking)       |
| 81432 | Machine operator, bag making (paper bag)                    | 81141 | Machine operator, cast concrete product       |
| 81649 | Machine operator, baked goods products                      | 81149 | Machine operator, cast stone making           |
| 81890 | Machine operator, baling (paper)                            | 81420 | Machine operator, casting (plastic goods)     |
| 81599 | Machine operator, baling and folding (textile weaving)      | 73211 | Machine operator, casting (printing type)     |
| 81691 | Machine operator, bean curd making                          | 81439 | Machine operator, cellophane bag making       |
| 81431 | Machine operator, bending (paper box)                       | 81649 | Machine operator, cereal processing           |
| 81641 | Machine operator, biscuit making                            | 81311 | Machine operator, chemical mixing             |
| 83425 | Machine operator, bituminous paving                         | 81689 | Machine operator, cheroot making              |
| 81311 | Machine operator, blending (chemical and related processes) | 81722 | Machine operator, chipping (veneer cutting)   |
| 81677 | Machine operator, blending (coffee)                         | 81625 | Machine operator, chocolate making            |
| 81677 | Machine operator, blending (tea)                            | 81689 | Machine operator, cigar making                |
| 81843 | Machine operator, book embossing                            | 81681 | Machine operator, cigarette making            |
| 81842 | Machine operator, bookbinding                               | 75361 | Machine operator, clicking (shoemaking)       |
| 81842 | Machine operator, book-sewing                               | 81599 | Machine operator, cloth doubling and winding  |
| 81255 | Machine operator, boring (metalworking)                     | 81419 | Machine operator, coating (rubber)            |
| 81739 | Machine operator, boring (woodworking)                      | 81331 | Machine operator, coating (tablets and pills) |
| 81830 | Machine operator, bottle washing                            | 81243 | Machine operator, coating (wire)              |
| 81830 | Machine operator, bottling                                  | 81678 | Machine operator, cocoa bean roasting         |
| 81431 | Machine operator, box making (paper box)                    |       |   |

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|-------|---|-------|--|
| 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                     |
| 81419 | Machine operator, dipping (rubber)  | 81531 | Machine operator, garment sewing                       |
| 81512 | Machine operator, doubling (thread and yarn)                              | 72122 | Machine operator, gas cutting (metal)                  |
| 81599 | Machine operator, drawing-in (textile weaving)                            | 81259 | Machine operator, gear cutting (metalworking)          |
| 81255 | Machine operator, drilling (metalworking)                                 | 81819 | Machine operator, glass blowing                        |
| 81591 | Machine operator, dry cleaning (laundry service)                          | 81819 | Machine operator, glass drawing                        |
|       |   | 81819 | Machine operator, glass moulding                       |
|       |   | 81819 | Machine operator, glass pressing                       |
|       |   | 81830 | Machine operator, goods branding                       |

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|-------|--|-------|--|
| 81830 | Machine operator, goods marking                        | 81256 | Machine operator, metal honing                               |
| 81630 | Machine operator, grain milling                        | 81253 | Machine operator, metal milling                              |
| 81331 | Machine operator, granulator                           | 81254 | Machine operator, metal planing                              |
| 81678 | Machine operator, grinding<br>(cocoa)                  | 81259 | Machine operator, metal sawing                               |
| 81678 | Machine operator, grinding<br>(coffee)                 | 81256 | Machine operator, metal shaping                              |
| 81256 | Machine operator, honing<br>(metalworking)             | 81251 | Machine operator, metalworking<br>(general)                  |
| 81522 | Machine operator, hosiery<br>knitting                  | 81253 | Machine operator, milling<br>(metalworking)                  |
| 81630 | Machine operator, husking (grain<br>milling)           | 81311 | Machine operator, mixing<br>(chemical and related processes) |
| 81692 | Machine operator, ice making                           | 81693 | Machine operator, mixing (feed)                              |
| 81624 | Machine operator, ice-cream<br>making                  | 73211 | Machine operator, monotype<br>casting (printing)             |
| 81712 | Machine operator, impregnating<br>(papermaking)        | 81420 | Machine operator, moulding<br>(plastics)                     |
| 81419 | Machine operator, impregnating<br>(rubber)             | 81259 | Machine operator, nail making                                |
| 81522 | Machine operator, knitting                             | 81642 | Machine operator, noodle making                              |
| 81719 | Machine operator, laminating<br>(papermaking)          | 81258 | Machine operator, numerical<br>control (metalworking)        |
| 81420 | Machine operator, laminating<br>(plastics)             | 81659 | Machine operator, nut grinding                               |
| 81412 | Machine operator, laminating<br>(rubber)               | 81830 | Machine operator, packing                                    |
| 81259 | Machine operator, lapping<br>(metalworking)            | 81432 | Machine operator, paper bag<br>making                        |
| 75361 | Machine operator, lasting<br>(shoemaking)              | 81890 | Machine operator, paper baling                               |
| 81591 | Machine operator, laundering                           | 81719 | Machine operator, paper coating                              |
| 81591 | Machine operator, laundry press                        | 81719 | Machine operator, paper<br>corrugating                       |
| 73154 | Machine operator, lens grinding                        | 81719 | Machine operator, paper creping                              |
| 73155 | Machine operator, lens polishing                       | 81719 | Machine operator, paper crinkling                            |
| 81432 | Machine operator, lining<br>(cardboard)                | 81439 | Machine operator, paper<br>embossing                         |
| 81522 | Machine operator, link and link-<br>knitting (garment) | 81432 | Machine operator, paper product<br>making                    |
| 73211 | Machine operator, ludlow casting<br>(printing)         | 81719 | Machine operator, paper<br>varnishing                        |
| 81642 | Machine operator, macaroni<br>making                   | 81719 | Machine operator, paper waxing                               |
| 81619 | Machine operator, meat<br>processing                   | 81719 | Machine operator, paperboard                                 |
| 81259 | Machine operator, metal bending                        | 81712 | Machine operator, papermaking                                |
| 81255 | Machine operator, metal boring                         | 81622 | Machine operator, pasteurising<br>(dairy products)           |
| 72241 | Machine operator, metal buffing<br>and polishing       | 81630 | Machine operator, pearling (grain<br>milling)                |
| 81255 | Machine operator, metal drilling                       | 81739 | Machine operator, pencil-making                              |
| 81257 | Machine operator, metal grinding                       | 75361 | Machine operator, perforating<br>(shoe finishing)            |
|       |  | 81331 | Machine operator,<br>pharmaceutical products                 |
|       |  | 73211 | Machine operator, photo-<br>composing                        |
|       |  | 81841 | Machine operator, photocopying                               |

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|-------|---|-------|---|
| 81320 | Machine operator, photograph printing               | 81412 | Machine operator, rubber laminating             |
| 81320 | Machine operator, photographic products             | 81739 | Machine operator, sanding (woodworking)         |
| 73211 | Machine operator, photo-type-setting                | 81655 | Machine operator, sauce making                  |
| 81254 | Machine operator, planing (metalworking)            | 81611 | Machine operator, sausage making                |
| 81739 | Machine operator, planing (woodworking)             | 81259 | Machine operator, sawing (metalworking)         |
| 81420 | Machine operator, plastic product making            | 81259 | Machine operator, screw cutting (metalworking)  |
| 81420 | Machine operator, plastics compression moulding     | 81830 | Machine operator, sealing and capping           |
| 81420 | Machine operator, plastics extruding                | 81522 | Machine operator, seamless hosiery knitting     |
| 81420 | Machine operator, plastics injection                | 81630 | Machine operator, separating (grain milling)    |
| 81420 | Machine operator, plastics laminating               | 81842 | Machine operator, sewing (books)                |
| 81723 | Machine operator, plywood core laying               | 81531 | Machine operator, sewing (garments)             |
| 72241 | Machine operator, polishing (metalworking)          | 81256 | Machine operator, shaping (metal-working)       |
| 81420 | Machine operator, polyfoam product-making           | 81739 | Machine operator, shaping (woodworking)         |
| 81420 | Machine operator, polythene bag making              | 81259 | Machine operator, shearing (metal cutting)      |
| 81257 | Machine operator, precision grinding (metalworking) | 81549 | Machine operator, singeing                      |
| 81890 | Machine operator, press baling                      | 81332 | Machine operator, soap making                   |
| 81591 | Machine operator, pressing (laundry service)        | 81522 | Machine operator, sock knitting                 |
| 81841 | Machine operator, printing                          | 75361 | Machine operator, sole sewing                   |
| 81711 | Machine operator, pulping (wood pulp)               | 81630 | Machine operator, spice milling                 |
| 81653 | Machine operator, refining (oils and fats)          | 81849 | Machine operator, stapling                      |
| 83425 | Machine operator, road surface laying               | 81522 | Machine operator, stocking knitting             |
| 83425 | Machine operator, road-making                       | 83425 | Machine operator, strike-off (concrete paving)  |
| 81678 | Machine operator, roasting (cocoa beans)            | 81660 | Machine operator, sugar processing and refining |
| 81678 | Machine operator, roasting (coffee beans)           | 81626 | Machine operator, sweets making                 |
| 81419 | Machine operator, rubber coating                    | 81676 | Machine operator, syrup making                  |
| 81419 | Machine operator, rubber dipping                    | 81331 | Machine operator, tableting                     |
| 81419 | Machine operator, rubber embossing                  | 83429 | Machine operator, tamping (construction)        |
| 81419 | Machine operator, rubber extruding                  | 83425 | Machine operator, tar spreading                 |
|       |   | 81677 | Machine operator, tea blending                  |
|       |   | 81143 | Machine operator, terrazzo tile making          |
|       |   | 81541 | Machine operator, textile bleaching             |

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|-------|--|-------|---|
| 81543 | Machine operator, textile shrinking                                  | 81255 | Machine setter, drilling (metalworking)           |
| 81543 | Machine operator, textile washing                                    | 81259 | Machine setter, gear cutting (metalworking)       |
| 81432 | Machine operator, toilet paper roll                                  | 81256 | Machine setter, honing (metalworking)             |
| 81339 | Machine operator, toiletry products                                  | 81259 | Machine setter, lapping (metalworking)            |
| 83421 | Machine operator, trench digging                                     | 81259 | Machine setter, metal bending                     |
| 81890 | Machine operator, tube-filling (except compressed and liquefied gas) | 81255 | Machine setter, metal boring                      |
| 83426 | Machine operator, tunnelling (construction)                          | 81255 | Machine setter, metal drilling                    |
| 81512 | Machine operator, twisting (thread and yarn)                         | 81257 | Machine setter, metal grinding                    |
| 73211 | Machine operator, type-casting                                       | 81256 | Machine setter, metal honing                      |
| 81419 | Machine operator, tyre making  | 81253 | Machine setter, metal milling                     |
| 81419 | Machine operator, tyre vulcanising                                   | 81254 | Machine setter, metal planing                     |
| 81719 | Machine operator, varnishing (papermaking)                           | 81259 | Machine setter, metal sawing                      |
| 81722 | Machine operator, veneer   | 81256 | Machine setter, metal shaping                     |
| 81642 | Machine operator, vermicelli making                                  | 81251 | Machine setter, metalworking (general)            |
| 81522 | Machine operator, warp knitting                                      | 81253 | Machine setter, milling (metalworking)            |
| 81830 | Machine operator, washing (bottles)                                  | 81259 | Machine setter, nail making                       |
| 81719 | Machine operator, waxing (papermaking)                               | 81258 | Machine setter, numerical control (metalworking)  |
| 81521 | Machine operator, weaving  | 81739 | Machine setter, pencil making                     |
| 81712 | Machine operator, wet-end (papermaking)                              | 81254 | Machine setter, planing (metalworking)            |
| 81512 | Machine operator, winding (thread and yarn)                          | 81739 | Machine setter, planing (woodworking)             |
| 81243 | Machine operator, wire coating                                       | 81257 | Machine setter, precision grinding (metalworking) |
| 81739 | Machine operator, wood planing                                       | 81739 | Machine setter, sanding (woodworking)             |
| 81729 | Machine operator, wood shavings                                      | 81259 | Machine setter, sawing (metalworking)             |
| 81731 | Machine operator, woodworking (general)                              | 81259 | Machine setter, screw cutting (metalworking)      |
| 81439 | Machine operator, wrapping (cardboard box covering)                  | 81256 | Machine setter, shaping (metalworking)            |
| 81830 | Machine packer   | 81739 | Machine setter, shaping (woodworking)             |
| 72149 | Machine riveter  | 81259 | Machine setter, shearing (metal cutting)          |
| 81255 | Machine setter, boring (metalworking)                                | 81739 | Machine setter, wood planing                      |
| 81739 | Machine setter, boring (woodworking)                                 | 81739 | Machine setter, wood routing                      |
| 81739 | Machine setter, carving (woodworking)                                | 81739 | Machine setter, wood shaping                      |
| 81259 | Machine setter, die sinking (metalworking)                           | 81731 | Machine setter, woodworking (general)             |
|       |  | 81599 | Machine setting, knitting                         |
|       |  | 81531 | Machine sewer (general)                           |

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|-------|---|-------|---|
| 72242 | Machine-tool grinder                          | 13460 | Manager, bank (branch)                                      |
| 81251 | Machine-tool operator (general)               | 14121 | Manager, banquet (hotel)                                    |
| 21442 | Machinery and tools engineer<br>(industrial)  | 14111 | Manager, boarding house                                     |
| 72335 | Machinery erector and installer               | 12111 | Manager, budget   |
| 72332 | Machinery fitter (general)                    | 12212 | Manager, business development                               |
| 72332 | Machinery fitter-assembler<br>(general)       | 12242 | Manager, call centre  |
| 31720 | Machinery inspector<br>(government)           | 14321 | Manager, casino operations                                  |
| 72331 | Machinery mechanic (general)                  | 14122 | Manager, catering services                                  |
| 31155 | Machining and tooling technician              | 14201 | Manager, chain store  |
| 31155 | Machining technician                          | 13410 | Manager, child care services                                |
| 34422 | Magician                                      | 14323 | Manager, cinema   |
| 26120 | Magistrate                                    | 12211 | Manager, commercial<br>(manufacturing or mining<br>company) |
| 21110 | Magnetism physicist                           | 13301 | Manager, computer and systems<br>Information                |
| 91121 | Maid (hotel)                                  | 13303 | Manager, computer operations<br>and network                 |
| 91309 | Maid, kitchen (private service)               | 13231 | Manager, construction                                       |
| 91122 | Maid, linen (hotel)                           | 12130 | Manager, corporate planning                                 |
| 51601 | Mail depot supervisor                         | 14330 | Manager, cultural centre                                    |
| 14201 | Mail order store manager                      | 12220 | Manager, customer relations<br>(hotel)                      |
| 51609 | Mail sorter (manual)                          | 12241 | Manager, customer service                                   |
| 51601 | Mail supervisor                               | 14201 | Manager, departmental store                                 |
| 83223 | Mail van driver                               | 14325 | Manager, discotheque  |
| 51602 | Mailman                                       | 14201 | Manager, discount store                                     |
| 71263 | Mains layer and jointer                       | 13241 | Manager, distribution                                       |
| 71151 | Maintenance carpenter                         | 13459 | Manager, education (dean of<br>education institution)       |
| 74110 | Maintenance electrician (building)            | 13459 | Manager, education (registrar)                              |
| 72339 | Maintenance fitter                            | 13304 | Manager, electronic data<br>processing                      |
| 71331 | Maintenance man, building                     | 21333 | Manager, energy   |
| 51311 | Maitre d'hotel                                | 13291 | Manager, engineering  |
| 61900 | Maize farmer                                  | 12191 | Manager, estate   |
| 73211 | Maker-up (photo-type-setting)                 | 12191 | Manager, facilities maintenance                             |
| 73211 | Maker-up, printing                            | 12191 | Manager, facilities management                              |
| 51423 | Make-up artist (stage and studio)             | 13101 | Manager, farm   |
| 81673 | Malt cooker                                   | 14121 | Manager, fast food restaurant                               |
| 81672 | Malt fireman                                  | 12111 | Manager, finance  |
| 81679 | Malt vinegar maker                            | 13460 | Manager, financial and insurance<br>services                |
| 81671 | Maltster                                      | 13460 | Manager, financial institution<br>branch                    |
| 32111 | Mammographer                                  | 31711 | Manager, fire safety  |
| 24211 | Management consultant                         | 13101 | Manager, fishery  |
| 33491 | Management executive (general)                | 14121 | Manager, food and beverage<br>department (hotel)            |
| 12111 | Manager, accounting (financial<br>department) | 13243 | Manager, freight traffic<br>Department                      |
| 12112 | Manager, administration                       |       |   |
| 12220 | Manager, advertising                          |       |   |
| 13430 | Manager, aged care services                   |       |   |
| 13101 | Manager, agriculture                          |       |   |
| 13243 | Manager, air traffic operations               |       |   |
| 14322 | Manager, amusement park                       |       |   |
| 14330 | Manager, arts                                 |       |   |

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| 14111 | Manager, front office (hotel)                | 13101 | Manager, production (farm)                         |
| 24133 | Manager, fund                                | 13211 | Manager, production (manufacturing)                |
| 14324 | Manager, garden                              | 13231 | Manager, project (construction)                    |
| 11122 | Manager, general (statutory board)           | 12191 | Manager, property                                  |
| 14111 | Manager, guest-house                         | 12220 | Manager, public relations                          |
| 13420 | Manager, health services                     | 12220 | Manager, publicity                                 |
| 14111 | Manager, hostel                              | 13242 | Manager, purchasing                                |
| 14111 | Manager, hotel                               | 13292 | Manager, quality assurance                         |
| 12121 | Manager, human resource                      | 12230 | Manager, research and development                  |
| 12122 | Manager, industrial relations                | 14121 | Manager, restaurant                                |
| 13301 | Manager, information systems                 | 14201 | Manager, retail trade                              |
| 13304 | Manager, information technology              | 24132 | Manager, risk (financial)                          |
| 13460 | Manager, insurance services manager          | 24132 | Manager, risk management                           |
| 13304 | Manager, IT service                          | 12211 | Manager, sales                                     |
| 14325 | Manager, karaoke lounge                      | 13243 | Manager, sea traffic operations                    |
| 12192 | Manager, landscape operations                | 14201 | Manager, self-service store                        |
| 14111 | Manager, lodging house                       | 13291 | Manager, shipyard                                  |
| 13241 | Manager, logistics                           | 13440 | Manager, social welfare                            |
| 14201 | Manager, mail order store                    | 13302 | Manager, software and applications                 |
| 12211 | Manager, marketing                           | 14310 | Manager, sports centre                             |
| 13299 | Manager, mining                              | 26549 | Manager, stage                                     |
| 14111 | Manager, motel                               | 13241 | Manager, stores department (manufacturing company) |
| 14324 | Manager, nature reserve                      | 14201 | Manager, supermarket                               |
| 13303 | Manager, network and communications          | 13242 | Manager, supplies                                  |
| 14325 | Manager, nightclub                           | 13291 | Manager, technical                                 |
| 13231 | Manager, operations (construction)           | 13303 | Manager, telecommunications operations             |
| 13243 | Manager, operations (port)                   | 14322 | Manager, theme park                                |
| 13244 | Manager, operations (postal service)         | 12123 | Manager, training                                  |
| 13303 | Manager, operations (telecommunications)     | 13243 | Manager, transport operations department           |
| 13243 | Manager, operations (transport)              | 24134 | Manager, treasury                                  |
| 14324 | Manager, park                                | 13241 | Manager, warehousing department                    |
| 13243 | Manager, passenger traffic department        | 14202 | Manager, wholesale trade                           |
| 12121 | Manager, personnel                           | 21493 | Manager, workplace safety and health               |
| 12130 | Manager, policy and planning                 | 11201 | Managing director                                  |
| 12130 | Manager, policy planning                     | 51422 | Manicurist   |
| 13243 | Manager, port operations                     | 52411 | Mannequin  |
| 13244 | Manager, postal service operations           | 33229 | Manufacturer's agent                               |
| 12191 | Manager, premises and facilities maintenance | 33229 | Manufacturer's sales representative                |
| 12191 | Manager, premises maintenance                | 21411 | Manufacturing engineer (general)                   |
| 13242 | Manager, procurement                         | 31006 | Manufacturing engineer, assistant                  |
| 13231 | Manager, production (construction)           |       |  |

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|-------|--|-------|--|
| 31171 | Manufacturing engineering technician (general) | 31591 | Master, dry dock                                       |
| 13211 | Manufacturing plant manager                    | 31591 | Master, graving dock                                   |
| 71131 | Marble polisher                                | 31521 | Master, ship   |
| 71220 | Marble setter                                  | 83129 | Master, yard (railway)                                 |
| 21444 | Marine architect                               | 31522 | Mate, first (ship)                                     |
| 21319 | Marine biologist                               | 31522 | Mate, second (ship)                                    |
| 21654 | Marine cartographer                            | 31522 | Mate, ship's   |
| 31186 | Marine draughtsperson                          | 93339 | Material handler (factory)                             |
| 31186 | Marine draughtsman                             | 43221 | Material planning clerk                                |
| 72334 | Marine engine fitter                           | 21492 | Materials engineer                                     |
| 72334 | Marine engine fitter-assembler                 | 33149 | Mathematical technician                                |
| 21443 | Marine engineer (shore-based)                  | 21211 | Mathematician  |
| 31512 | Marine engineer officer                        | 32201 | Matron (nursing)                                       |
| 31186 | Marine engineering draughtsman                 | 51503 | Matron-housekeeper                                     |
| 31186 | Marine engineering draughtsperson              | 75343 | Mattress maker   |
| 31159 | Marine engineering technician                  | 75343 | Mattress sewer   |
| 71262 | Marine pipe fitter                             | 75119 | Meat boner   |
| 54121 | Marine policeman                               | 75119 | Meat curer   |
| 31524 | Marine superintendent (deck)                   | 75119 | Meat cutter  |
| 31513 | Marine superintendent (technical)              | 75119 | Meat dresser (general)                                 |
| 31513 | Marine superintendent engineer                 | 75119 | Meat grader  |
| 21653 | Marine surveyor                                | 81619 | Meat processing machine operator                       |
| 31157 | Marine surveyor (ship and nautical)            | 75119 | Meat smoker  |
| 75323 | Marker, garment cutting                        | 72333 | Mechanic, accounting and calculating machine           |
| 71329 | Marker, highway lane                           | 72321 | Mechanic, aeronautical                                 |
| 72229 | Marker, metal                                  | 72339 | Mechanic, agricultural machinery                       |
| 72139 | Marker, sheet metal                            | 71271 | Mechanic, air-conditioning and refrigerating equipment |
| 72149 | Marker, structural metal                       | 72321 | Mechanic, aircraft engine                              |
| 75229 | Marker, woodworking                            | 72311 | Mechanic, automobile                                   |
| 24312 | Market research analyst                        | 72311 | Mechanic, bus  |
| 43142 | Market research interviewer                    | 72333 | Mechanic, business machine                             |
| 40000 | Market research supervisor                     | 74222 | Mechanic, computer and related equipment               |
| 24312 | Market researcher                              | 72333 | Mechanic, construction machinery                       |
| 41109 | Marketing assistant                            | 72339 | Mechanic, diesel engine (except motor vehicle)         |
| 33221 | Marketing executive                            | 72333 | Mechanic, earth moving equipment                       |
| 12211 | Marketing manager                              | 74123 | Mechanic, electrical household appliance               |
| 81830 | Marking machine operator, goods                | 72339 | Mechanic, engine-room (ship)                           |
| 34222 | Martial arts instructor                        | 72339 | Mechanic, farm machinery                               |
| 81673 | Mash-tub man (malt preparation)                | 72311 | Mechanic, garage (automobile)                          |
| 71131 | Mason, monumental                              | 72321 | Mechanic, hydraulic systems (aircraft)                 |
| 71132 | Mason, stone (construction)                    | 72333 | Mechanic, industrial machinery                         |
| 71230 | Mason, stucco                                  | 72331 | Mechanic, machinery (general)                          |
| 32552 | Massage therapist                              |       |  |
| 32552 | Masseur (medical)                              |       |  |
| 51491 | Masseur (non-medical)                          |       |  |
| 32552 | Masseur, sports                                |       |  |
| 71151 | Mast and spar maker, wood                      |       |  |
| 26523 | Master, chorus                                 |       |  |

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|-------|---|-------|--|
| 72333 | Mechanic, metalworking machine tool                 | 21447 | Mechanical engineer (heating, ventilation and refrigeration) |
| 72333 | Mechanic, mining machinery                          | 21442 | Mechanical engineer (industrial machinery and tools)         |
| 72311 | Mechanic, motor (general)                           | 21443 | Mechanical engineer (marine)                                 |
| 72311 | Mechanic, motor truck                               | 21449 | Mechanical engineer (motors and engines, except marine)      |
| 72311 | Mechanic, motor vehicle (automobile)                | 31004 | Mechanical engineer, assistant                               |
| 72311 | Mechanic, motor-cycle                               | 31151 | Mechanical engineering technician (general)                  |
| 72333 | Mechanic, office machine                            | 31159 | Mechanical engineering technician (motors and engines)       |
| 72339 | Mechanic, plant maintenance                         | 82132 | Mechanical products checker (quality assurance)              |
| 72333 | Mechanic, printing machinery                        | 82132 | Mechanical products quality checker                          |
| 74221 | Mechanic, radar                                     | 82132 | Mechanical products tester                                   |
| 74212 | Mechanic, radio and television receiving set        | 83421 | Mechanical shovel operator                                   |
| 74221 | Mechanic, radio transmitter                         | 83490 | Mechanical sweeper driver                                    |
| 72321 | Mechanic, service (aircraft engine)                 | 21110 | Mechanics physicist  |
| 72339 | Mechanic, ship's engine-room                        | 31191 | Mechantronics technician                                     |
| 74212 | Mechanic, sound reproducing and recording equipment | 32111 | Medical diagnostic radiographer                              |
| 74224 | Mechanic, telecommunications and telephone          | 32120 | Medical laboratory technician                                |
| 74224 | Mechanic, telegraphic                               | 31171 | Medical manufacturing specialist                             |
| 74224 | Mechanic, telephone and telecommunications          | 22125 | Medical oncologist   |
| 74224 | Mechanic, telephone and telegraph                   | 22146 | Medical pathologist  |
| 74212 | Mechanic, television and radio receiving set        | 34310 | Medical photographer   |
| 74221 | Mechanic, television transmitter                    | 22110 | Medical practitioner (general)                               |
| 72333 | Mechanic, textile machinery                         | 32112 | Medical radiation therapist                                  |
| 72311 | Mechanic, tractor                                   | 42243 | Medical receptionist   |
| 72311 | Mechanic, transmission (motor vehicle)              | 33223 | Medical sales representative                                 |
| 72311 | Mechanic, truck                                     | 21346 | Medical scientist  |
| 72339 | Mechanic, turbine (except aircraft turbine)         | 22149 | Medical service physician (school)                           |
| 72333 | Mechanic, typewriter                                | 26353 | Medical social worker  |
| 74212 | Mechanic, video reproducing and recording equipment | 32114 | Medical x-ray technician                                     |
| 72333 | Mechanic, woodworking machinery                     | 22129 | Medicine physician, nuclear                                  |
| 72311 | Mechanic, workshop (automobile)                     | 39910 | Medium   |
| 31182 | Mechanical draughtsman                              | 11110 | Member of parliament   |
| 31182 | Mechanical draughtsperson                           | 51412 | Men's hairdresser  |
| 21445 | Mechanical engineer (aeronautical)                  | 34129 | Mental health worker   |
| 21446 | Mechanical engineer (automotive)                    | 96253 | Mental hospital attendant                                    |
| 21441 | Mechanical engineer (general)                       | 26353 | Mental welfare worker  |
|       |   | 33231 | Merchandise buyer (wholesale or retail trade)                |
|       |   | 33231 | Merchandise purchaser (wholesale or retail trade)            |
|       |   | 14204 | Merchant, wholesale (working proprietor)                     |
|       |   | 96259 | Merry-go-round operator                                      |

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|-------|---|-------|--|
| 51202 | 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                      |
| 81256 | Metal honing machine setter-operator              | 81252 | Metalworking lathe setter-operator               |
| 72229 | Metal marker                                      | 81251 | Metalworking machine setter-operator (general)   |
| 81211 | Metal melting furnaceman                          | 72333 | Metalworking machine-tool mechanic               |
| 81253 | Metal milling machine operator                    | 81259 | Metalworking machine-tool operator (general)     |
| 81253 | Metal milling machine setter-operator             | 73119 | Meteorological instrument maker                  |
| 31199 | Metal mining technician                           | 31119 | Meteorological technician                        |
| 73120 | Metal musical wind instrument maker               | 21120 | Meteorologist                                    |
| 72223 | Metal pattern-maker                               | 96292 | Meter reader                                     |
| 81254 | Metal planing machine operator                    | 21419 | Methods engineer                                 |
| 81254 | Metal planing machine setter-operator             | 21319 | Microbiologist                                   |
| 72149 | Metal plate bender                                | 82122 | Microelectronics assembler                       |
| 81219 | Metal pourer                                      | 21141 | Micropalaeontologist                             |
| 81259 | Metal press operator                              | 59009 | Microphone operator                              |
| 73219 | Metal printing plate, roller and die engraver     | 34310 | Microphotographer                                |
| 73219 | Metal printing roller engraver                    | 32201 | Midwife, auxiliary                               |
| 82199 | Metal products assembler                          | 61210 | Milk producer (farm)                             |
| 81255 | Metal reamer operator                             | 61210 | Milker   |
| 81255 | Metal reamer setter-operator                      | 61210 | Milking machine operator                         |
| 81211 | Metal refining furnace operator                   | 81311 | Miller, chemicals                                |
| 81211 | Metal reheating furnaceman                        | 81653 | Miller, coconut oil                              |
| 81215 | Metal rolling mill worker                         | 81653 | Miller, copra                                    |
|       |   | 81653 | Miller, gingili                                  |
|       |   | 81630 | Miller, grain                                    |

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|-------|---|-------|---|
| 81630 | Miller, mustard                                 | 81819 | Mixer, glaze  |
| 81630 | Miller, oil-seed                                | 81311 | Mixer, paint  |
| 81630 | Miller, rice                                    | 75123 | Mixer, paste (pies)   |
| 81630 | Miller, spice                                   | 35219 | Mixer, sound  |
| 81699 | Miller, tapioca                                 | 81626 | Mixer, sugar confectionery  |
| 81311 | Miller-grinder (chemical and related processes) | 75190 | Mixer, tobacco  |
| 75390 | Milliner  | 81311 | Mixing and blending machine operator (chemical and related processes) |
| 81253 | Milling machine operator (metalworking)         | 81311 | Mixing machine operator (chemical and related processes)              |
| 81630 | Milling machine operator, corn                  | 81693 | Mixing machine operator, feed   |
| 81630 | Milling machine operator, grain                 | 81411 | Mixing mill operator, rubber  |
| 81630 | Milling machine operator, spice                 | 81144 | Mixing plant operator, concrete                                       |
| 81253 | Milling machine setter-operator (metalworking)  | 83431 | Mobile crane operator   |
| 81819 | Millman, clay                                   | 83000 | Mobile machinery supervisor and general foreman                       |
| 81819 | Millman, potter's                               | 52411 | Model (clothing display)  |
| 81411 | Millman, rubber                                 | 75229 | Model maker (wood)  |
| 72333 | Millwright                                      | 52419 | Model, artist's   |
| 81139 | Miner   | 52411 | Model, fashion  |
| 81149 | Mineral crushing machine operator               | 73141 | Modeller, pottery and porcelain                                       |
| 81149 | Mineral ore and stone treating plant operator   | 81626 | Mogul operator (sugar confectionery)                                  |
| 21149 | Mineralogist                                    | 33112 | Money broker  |
| 31199 | Mines inspector                                 | 42113 | Money changer   |
| 26512 | Miniature painter                               | 42132 | Moneylender   |
| 21469 | Mining engineer (coal)                          | 39910 | Monk  |
| 21469 | Mining engineer (metal)                         | 73211 | Monotype casting machine operator (printing)                          |
| 21461 | Mining engineer (petroleum and natural gas)     | 73211 | Monotype keyboard operator  |
| 31199 | Mining engineering technician                   | 71131 | Monument carver-setter  |
| 72333 | Mining machinery mechanic                       | 71131 | Monumental mason  |
| 13299 | Mining manager                                  | 43129 | Mortgage clerk  |
| 81139 | Mining plant operator                           | 51931 | Mortician   |
| 31199 | Mining technician                               | 81739 | Morticing machine operator (woodworking)                              |
| 11110 | Minister (government)                           | 81739 | Morticing machine setter-operator (woodworking)                       |
| 29011 | Minister of religion                            | 51931 | Mortuary assistant  |
| 73162 | Mirror silverer                                 | 71220 | Mosaic cutter and setter  |
| 72249 | Mirror-finish polisher (metalworking)           | 14112 | Motel keeper (working proprietor)                                     |
| 29019 | Missionary                                      | 14111 | Motel manager   |
| 61900 | Mixed farm worker                               | 35213 | Motion picture camera operator  |
| 81819 | Mixer (glass making)                            | 26513 | Motion picture cartoonist   |
| 75390 | Mixer and blender, fibre                        | 26542 | Motion picture director   |
| 81144 | Mixer operator, concrete                        | 26541 | Motion picture producer   |
| 81819 | Mixer, abrasives                                | 21419 | Motion study engineer   |
| 81819 | Mixer, clay                                     | 31179 | Motion study technician   |
| 75122 | Mixer, dough (bread)                            | 83509 | Motor boatman   |
| 75390 | Mixer, fibre                                    | 72311 | Motor bus mechanic  |
| 75123 | Mixer, flour confectionery                      |       |   |

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|-------|---|-------|---|
| 21446 | Motor car designer                                | 73139 | Mounter, jewellery                      |
| 83222 | Motor car driver (private)                        | 73219 | Mounter, photogravure                   |
| 83221 | Motor car driver (taxi)                           | 73219 | Mounter, plate                          |
| 72311 | Motor car mechanic                                | 73219 | Mounter, plate (photo-engraving)        |
| 83210 | Motor cyclist (delivery man)                      | 93336 | Mover, furniture                        |
| 72311 | Motor lorry mechanic                              | 31597 | MRT operations officer (traffic)        |
| 72311 | Motor mechanic (general)                          | 31572 | MRT service supervisor                  |
| 54121 | Motor patrolman (police)                          | 42149 | MRT station assistant (fare collection) |
| 72311 | Motor truck mechanic                              | 91139 | MRT station cleaner                     |
| 72311 | Motor van mechanic                                | 31599 | MRT station master                      |
| 71322 | Motor vehicle body repainter                      | 31599 | MRT supervisor (station master)         |
| 91220 | Motor vehicle cleaner                             | 31597 | MRT traffic officer                     |
| 74110 | Motor vehicle electrician                         | 83110 | MRT train operator                      |
| 72311 | Motor vehicle fitter                              | 81139 | Mud-plant operator (oil and gas wells)  |
| 72311 | Motor vehicle mechanic (automobile)               | 34364 | Multimedia animator                     |
| 71322 | Motor vehicle painter                             | 34363 | Multimedia artist                       |
| 91220 | Motor vehicle polisher                            | 34362 | Multimedia designer                     |
| 52202 | Motor vehicle sales representative                | 25123 | Multimedia developer                    |
| 83210 | Motorcycle delivery man                           | 25123 | Multimedia programmer                   |
| 72311 | Motor-cycle mechanic                              | 26212 | Museum curator                          |
| 54121 | Motor-cycle patrolman                             | 54123 | Museum guard                            |
| 83490 | Motorised farm machinery operator                 | 51139 | Museum guide                            |
| 81823 | Motorman, ship                                    | 14330 | Museum manager                          |
| 34210 | Motor-racing driver                               | 34332 | Museum technician                       |
| 83210 | Motor-tricycle driver (goods)                     | 61112 | Mushroom farm supervisor                |
| 31156 | Mould designer                                    | 61112 | Mushroom farm worker                    |
| 72146 | Mould lofter                                      | 61112 | Mushroom farmer                         |
| 73141 | Mould maker, pottery and porcelain                | 26522 | Music composer                          |
| 72111 | Moulder (metal)                                   | 26421 | Music critic                            |
| 73149 | Moulder, abrasive wheel                           | 26529 | Music director                          |
| 81419 | Moulder, air-bag (tyre making)                    | 26523 | Music director (band)                   |
| 73213 | Moulder, electrotype                              | 26523 | Music director (choir)                  |
| 73152 | Moulder, glass lens                               | 26543 | Music director (concert)                |
| 72111 | Moulder, jarring machine                          | 26543 | Music director (film)                   |
| 72111 | Moulder, jolting machine                          | 26523 | Music director (orchestra)              |
| 72111 | Moulder, squeeze machine                          | 26543 | Music director (radio)                  |
| 73212 | Moulder, stereotype                               | 26543 | Music director (stage)                  |
| 72111 | Moulder, stripping-plate machine                  | 26543 | Music director (theatre)                |
| 73142 | Moulder, tile and brick                           | 26543 | Music director (TV)                     |
| 81419 | Moulder, tyre                                     | 36204 | Music instructor (extracurriculum)      |
| 81819 | Moulding machine operator, glass                  | 73219 | Music printing engraver                 |
| 81420 | Moulding machine operator, plastics (compression) | 36204 | Music teacher (private tuition)         |
| 81420 | Moulding machine operator, plastics (injection)   | 73120 | Musical instrument maker (stringed)     |
| 81419 | Moulding press operator, rubber                   | 73120 | Musical instrument maker (woodwind)     |
|       |   | 73120 | Musical instrument maker, metal (wind)  |
|       |   | 73120 | Musical instrument repairer             |

73120 Musical instrument tuner  
 26529 Musical programme director  
 26521 Musician, instrumental  
 81630 Mustard miller  
 21312 Mycologist

## N

81259 Nail making machine operator  
 53111 Nanny  
 54122 Narcotics officer  
 34332 Naturalist (taxidermist)  
 51132 Nature guide  
 14324 Nature reserve manager  
 32300 Naturopath  
 73119 Nautical instrument maker  
 21444 Naval architect  
 31522 Navigating officer, ship's  
 31533 Navigator, flight  
 X3000 Navy (Singapore)  
 72229 Needle maker  
 74129 Neon-lighting electrician  
 81599 Net maker (fishing)  
 25220 Network administrator  
 13303 Network and communications  
 manager  
 25230 Network architect  
 25230 Network engineer  
 35120 Network support technician  
 25230 Network systems analyst  
 22129 Neurologist  
 22146 Neuropathologist  
 22134 Neurosurgeon  
 34412 News anchor  
 26422 News editor (newspaper)  
 26422 News editor (periodical)  
 34310 News photographer  
 34411 News reader, radio  
 34412 News reader, television  
 34411 Newscaster (radio)  
 34412 Newscaster (television)  
 26421 Newspaper correspondent  
 96291 Newspaper delivery man  
 26422 Newspaper editor  
 26422 Newspaper editor-in-chief  
 26421 Newspaper reporter  
 26422 Newspaper sub-editor  
 52130 Newsvendor  
 51330 Night club hostess  
 96261 Night watchman

14325 Nightclub manager  
 81314 Nitric acid plant operator  
 81220 Nitriдер  
 21469 Non-metalliferous mining  
 engineer  
 39910 Non-ordained religious associate  
 professional  
 81642 Noodle making machine operator  
 51603 Notice server  
 26411 Novelist  
 22129 Nuclear medicine physician  
 81860 Nuclear power reactor operator  
 81258 Numerical control machine  
 operator (metalworking)  
 81258 Numerical control machine setter-  
 operator (metalworking)  
 39910 Nun  
 32201 Nurse (anaesthetist)  
 32201 Nurse (clinic)  
 32201 Nurse (maternity)  
 32201 Nurse (obstetrics)  
 32201 Nurse (orthopaedic)  
 32201 Nurse (paediatric)  
 32201 Nurse (psychiatric)  
 32201 Nurse anaesthetist  
 32201 Nurse educator  
 32201 Nurse, clinical  
 32511 Nurse, dental  
 32511 Nurse, dental (school)  
 32201 Nurse, industrial  
 32201 Nurse, occupational health  
 32202 Nurse, private  
 32201 Nurse, professional (general)  
 32201 Nurse, public health  
 32400 Nurse, veterinary  
 53112 Nursemaid  
 36100 Nursery school teacher  
 53113 Nursery worker (child care)  
 61132 Nursery worker (farm)  
 96253 Nursing aid  
 53201 Nursing aide (clinic, hospital)  
 53209 Nursing aide (home)  
 13430 Nursing home director  
 61900 Nut farmer  
 81659 Nut grinding machine operator  
 81259 Nut maker  
 61900 Nutmeg farm worker  
 32522 Nutritionist  
 32522 Nutritionist, public health  
 32522 Nutritionist, sports  
 81315 Nylon spinner

## O

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|-------|--|-------|--|
| 22144 | Obstetrician                                 | 22149 | Oncologist, radiation                      |
| 24231 | Occupational analyst                         | 81211 | Open hearth furnaceman (steel)             |
| 32572 | Occupational health inspector                | 83431 | Opening-bridge operator                    |
| 32201 | Occupational health nurse                    | 26524 | Opera singer                               |
| 22631 | Occupational health professional             | 33493 | Operations liaison assistant               |
| 32572 | Occupational health officer                  | 13243 | Operations manager (air traffic)           |
| 22149 | Occupational physician                       | 13231 | Operations manager<br>(construction)       |
| 26340 | Occupational psychologist                    | 13243 | Operations manager (port)                  |
| 32560 | Occupational therapist                       | 13244 | Operations manager (postal<br>service)     |
| 21141 | Oceanographer, geological                    | 13243 | Operations manager (sea traffic)           |
| 21142 | Oceanographer, geophysical                   | 13303 | Operations manager<br>(telecommunications) |
| 96293 | Odd job person                               | 13243 | Operations manager (transport)             |
| 75119 | Offal man                                    | 14321 | Operations manager, casino                 |
| 96251 | Office attendant                             | 13303 | Operations manager, computer               |
| 96251 | Office boy                                   | 31594 | Operations officer, flight                 |
| 52303 | Office cashier                               | 31597 | Operations officer, MRT (traffic)          |
| 91131 | Office cleaner                               | 21212 | Operations research analyst                |
| 41101 | Office clerk (general)                       | 35110 | Operator, computer                         |
| 82121 | Office machine assembler<br>(electrical)     | 35110 | Operator, computer high-speed<br>printer   |
| 82122 | Office machine assembler<br>(electronic)     | 35110 | Operator, computer peripheral<br>equipment |
| 72333 | Office machine mechanic                      | 22145 | Ophthalmologist                            |
| 72339 | Office machinery fitter                      | 73153 | Optical glass cutter                       |
| 72339 | Office machinery fitter-assembler            | 73153 | Optical glass slicer                       |
| 40000 | Office supervisor (general)                  | 73153 | Optical glass slitter                      |
| 33149 | Officer, actuarial                           | 73113 | Optical instrument maker and<br>repairer   |
| 33593 | Officer, building permit licensing           | 32541 | Optician (ophthalmic)                      |
| 33593 | Officer, business permit licensing           | 32542 | Optician, dispensing                       |
| 33591 | Officer, excise                              | 32542 | Optician, refracting                       |
| 33330 | Officer, job placement                       | 21110 | Optics physicist                           |
| 34331 | Officer, library                             | 32541 | Optometrist                                |
| 32572 | Officer, occupational health                 | 32512 | Oral health therapist                      |
| 33510 | Officer, passport checking                   | 32512 | Oral hygienist                             |
| 33593 | Officer, passport issuing                    | 22612 | Oral surgeon                               |
| 33142 | Officer, research (statistical)              | 61900 | Orchard supervisor                         |
| 33592 | Officer, social benefits                     | 61900 | Orchard worker                             |
| 33141 | Officer, statistical                         | 26523 | Orchestra conductor                        |
| 33591 | Officer, tax                                 | 26522 | Orchestrator                               |
| 81841 | Offset pressman                              | 61131 | Orchid farmer                              |
| 72156 | Oil and gas well drilling rigger             | 21325 | Orchidologist                              |
| 81871 | Oil blender (petroleum refining)             | 43221 | Order clerk (materials)                    |
| 75190 | Oil expeller                                 | 83502 | Ordinary seaman                            |
| 81652 | Oil pressman (edible oils)                   | 81149 | Ore crusher operator                       |
| 33241 | Oil trader                                   | 81211 | Ore smelting furnace operator              |
| 81859 | Oiler and greaser (except ship's<br>engines) | 73120 | Organ builder                              |
| 81823 | Oiler and greaser, ship's                    | 73120 | Organ pipe maker                           |
| 81139 | Oilwell fishing-tool operator                |       |  |

73120 Organ tuner  
 21419 Organisation and methods engineer  
 33320 Organiser, convention  
 33320 Organiser, exhibition  
 33290 Organiser, sales (regional or overseas)  
 33463 Organiser, staff training  
 34129 Organising secretary (community centre)  
 26521 Organist  
 71230 Ornamental plasterer  
 72139 Ornamental sheet metal worker  
 21313 Ornithologist  
 22612 Orthodontist  
 32142 Orthopaedic appliance maker and repairer  
 75362 Orthopaedic footwear maker  
 22135 Orthopaedic surgeon  
 32141 Orthopaedic technician  
 32541 Orthoptist  
 32141 Orthotic technician  
 32142 Orthotist  
 32591 Osteopath  
 22129 Osteopathic physician  
 22148 Otolaryngologist  
 22148 Otorhinolaryngologist  
 71311 Outdoor painter (construction)  
 52422 Outdoor salesman  
 71120 Oven bricklayer  
 81312 Oven tender (paint drying)  
 81641 Ovenman (biscuits)  
 75122 Ovenman (bread)  
 81312 Ovenman (chemical and related processes)  
 75123 Ovenman (flour confectionery)  
 81811 Ovenman, brick and tile  
 81811 Ovenman, pottery and porcelain  
 74131 Overhead wireman (electric power)  
 74131 Overhead wireman (electric traction)  
 74223 Overhead wireman (telephone and telegraph)  
 81872 Oxygen filler  
 62219 Oyster farm worker

**P**

34352 Package designer  
 93201 Packer, hand  
 81830 Packer, machine  
 81830 Packing machine operator  
 81320 Paco-machine operator  
 22136 Paediatric surgeon  
 22126 Paediatrician  
 21130 Paint chemist  
 81311 Paint mixer  
 26512 Painter (artist)  
 71323 Painter, advertisement (sign writing)  
 71322 Painter, automobile  
 71329 Painter, automobile (motor vehicle assembly)  
 71322 Painter, automobile repair  
 26512 Painter, batik  
 71311 Painter, brush (building)  
 73169 Painter, brush (except construction)  
 71311 Painter, building  
 73162 Painter, ceramic  
 71311 Painter, construction  
 73162 Painter, glass  
 71329 Painter, hand-dip (except glass and ceramics)  
 71311 Painter, house  
 26512 Painter, miniature  
 71322 Painter, motor vehicle  
 71311 Painter, outdoor (construction)  
 26512 Painter, portrait  
 71329 Painter, scenery (stage set)  
 71329 Painter, set (motion picture)  
 71321 Painter, ship hull and structural steel  
 71329 Painter, ship's interior  
 71323 Painter, sign  
 71311 Painter, spray (building)  
 73162 Painter, spray (ceramics)  
 71324 Painter, spray (except ships, motor vehicles and signs)  
 71329 Painter, spray (motor vehicle assembly)  
 71322 Painter, spray (motor vehicle)  
 71329 Painter, stage scenery  
 71321 Painter, structural steel and ship hull

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|-------|--|-------|---|
| 71329 | Painter-retoucher<br>(manufacturing)         | 11110 | Parliamentarian                                 |
| 26519 | Painting restorer                            | 26112 | Parliamentary draughtsman                       |
| 21141 | Palaeontologist                              | 26354 | Parole officer                                  |
| 51910 | Palmist                                      | 71220 | Parquetry floor layer                           |
| 72139 | Panel beater (aircraft)                      | 71220 | Parquetry worker                                |
| 72133 | Panel beater (vehicle)                       | 71230 | Partition installer (plaster)                   |
| 73219 | Pantograph engraver operator                 | 13243 | Passenger traffic department<br>manager         |
| 73161 | Pantograph operator (glass<br>decorating)    | 33510 | Passport checking officer                       |
| 81432 | Paper bag and envelope maker                 | 33593 | Passport issuing officer                        |
| 81890 | Paper baling machine operator                | 75123 | Paste mixer (pies)                              |
| 81431 | Paper box maker                              | 81675 | Pasteuriser attendant (malt<br>liquor)          |
| 81719 | Paper coating machine operator               | 81622 | Pasteurising machine operator,<br>dairy product |
| 81719 | Paper corrugating machine<br>operator        | 29011 | Pastor  |
| 81719 | Paper creping machine operator               | 75123 | Pastry baker                                    |
| 81719 | Paper crinkling machine operator             | 51202 | Pastry cook (restaurant)                        |
| 81439 | Paper embossing machine<br>operator          | 75123 | Pastry maker                                    |
| 73219 | Paper embossing press operator<br>(printing) | 29090 | Patent agent                                    |
| 73149 | Paper maker, abrasive-coated                 | 22500 | Pathologist, animal                             |
| 81320 | Paper maker, photographic                    | 22146 | Pathologist, clinical                           |
| 81712 | Paper making machine operator                | 22146 | Pathologist, forensic                           |
| 81432 | Paper novelty maker                          | 22146 | Pathologist, medical                            |
| 81432 | Paper product making machine<br>operator     | 21323 | Pathologist, plant                              |
| 81711 | Paper pulp beater operator                   | 26321 | Pathologist, social                             |
| 81711 | Paper pulp bleacher operator                 | 32532 | Pathologist, speech                             |
| 81711 | Paper pulp digester operator                 | 22146 | Pathologist, surgical                           |
| 81711 | Paper pulp preparation plant<br>operator     | 22500 | Pathologist, veterinary                         |
| 81432 | Paper strawmaker                             | 32120 | Pathology technician                            |
| 81719 | Paper varnishing machine<br>operator         | 54140 | Patrolman (private establishment)               |
| 81719 | Paper waxing machine operator                | 54199 | Patrolman, forest                               |
| 81719 | Paperboard machine operator                  | 54121 | Patrolman, highway                              |
| 71312 | Paperhanger                                  | 54121 | Patrolman, motor (police)                       |
| 81871 | Paraffin plant operator                      | 54121 | Patrolman, motor-cycle                          |
| 34110 | Paralegal                                    | 54121 | Patrolman, police                               |
| 34110 | Paralegal associate professional             | 54140 | Patrolman, security                             |
| 32594 | Paramedic                                    | 75229 | Pattern-maker (wood)                            |
| 21313 | Parasitologist                               | 75322 | Pattern-maker, garment                          |
| 43239 | Parcel clerk (railway)                       | 75361 | Pattern-maker, shoe                             |
| 96130 | Park cleaner                                 | 83425 | Paving machine operator,<br>concrete            |
| 92149 | Park maintenance man                         | 71120 | Paviour installer                               |
| 14324 | Park manager                                 | 42131 | Pawnbroker                                      |
| 54194 | Park ranger                                  | 43114 | Paymaster                                       |
| 96130 | Park sweeper                                 | 43114 | Payroll clerk                                   |
| 31603 | Parks officer                                | 81630 | Pearling machine operator (grain<br>milling)    |
|       |  | 93310 | Pedal vehicle driver                            |
|       |  | 72339 | Pedal-cycle repairer                            |
|       |  | 93310 | Pedaller, trishaw                               |

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|-------|---|-------|---|
| 83490 | Pedestrian tractor operator                         | 31162 | Petroleum refining technician               |
| 22612 | Pedodontist   | 21141 | Petrologist                                 |
| 75390 | Pelt dresser, tanner and<br>fellmonger              | 73139 | Pewtersmith                                 |
| 75390 | Pelt dyer   | 21130 | Pharmaceutical chemist                      |
| 75390 | Pelt finisher                                       | 81331 | Pharmaceutical products<br>machine operator |
| 75390 | Pelt grader   | 33223 | Pharmaceutical representative               |
| 81739 | Pencil making machine operator                      | 33223 | Pharmaceutical sales<br>representative      |
| 81739 | Pencil making machine setter-<br>operator           | 32130 | Pharmaceutical technician                   |
| 26321 | Penologist  | 22621 | Pharmacist                                  |
| 96251 | Peon  | 22621 | Pharmacist (dispensing)                     |
| 61900 | Pepper farm worker                                  | 22621 | Pharmacist, hospital                        |
| 75361 | Perforating machine operator<br>(shoe finishing)    | 22629 | Pharmacist, industrial                      |
| 51943 | Performer in crocodile farm                         | 22621 | Pharmacist, retail                          |
| 81314 | Perfume distiller                                   | 21341 | Pharmacologist                              |
| 81314 | Perfume stillman                                    | 31419 | Pharmacology technician                     |
| 26422 | Periodical editor                                   | 26339 | Philosopher                                 |
| 26422 | Periodical sub-editor                               | 26332 | Philosopher, political                      |
| 22612 | Periodontist  | 73211 | Photo-composing machine<br>operator         |
| 11121 | Permanent secretary                                 | 81841 | Photocopying machine operator               |
| 41201 | Personal assistant                                  | 73214 | Photo-engraver                              |
| 51509 | Personal butler                                     | 73219 | Photo-engraving finisher                    |
| 41103 | Personnel assistant                                 | 73219 | Photo-engraving plate grainer               |
| 41103 | Personnel clerk                                     | 73219 | Photo-engraving plate moulder               |
| 33461 | Personnel executive                                 | 73219 | Photo-engraving prover                      |
| 12121 | Personnel manager                                   | 21659 | Photogrammetrist                            |
| 33461 | Personnel officer                                   | 81320 | Photograph developer                        |
| 75401 | Pest controller                                     | 81320 | Photograph printer                          |
| 75401 | Pest exterminator                                   | 81320 | Photograph printing machine<br>operator     |
| 51941 | Pet groomer   | 34310 | Photographer (commercial<br>illustrator)    |
| 44199 | Petition writer                                     | 34310 | Photographer (general)                      |
| 21453 | Petrochemicals engineer                             | 34310 | Photographer, advertising                   |
| 31163 | Petrochemicals technician<br>(chemical engineering) | 34310 | Photographer, aerial                        |
| 52491 | Petrol pump attendant                               | 34310 | Photographer, architectural                 |
| 52491 | Petrol service station attendant                    | 34310 | Photographer, commercial                    |
| 21461 | Petroleum and natural gas<br>engineer               | 34310 | Photographer, fashion                       |
| 31194 | Petroleum and natural gas<br>extraction technician  | 34310 | Photographer, industrial                    |
| 21130 | Petroleum chemist                                   | 34310 | Photographer, medical                       |
| 81871 | Petroleum desulphurisation<br>treater               | 34310 | Photographer, news                          |
| 81871 | Petroleum refining blender                          | 73215 | Photographer, photogravure                  |
| 21452 | Petroleum refining engineer                         | 34310 | Photographer, police                        |
| 81871 | Petroleum refining plant control<br>man             | 34310 | Photographer, portrait                      |
| 81871 | Petroleum refining pumpman                          | 34310 | Photographer, press                         |
| 81871 | Petroleum refining stillman                         | 34310 | Photographer, scientific                    |
|       |   | 34310 | Photographer, sports                        |
|       |   | 81320 | Photographic dark room worker               |

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|-------|---|-------|---|
| 73119 | Photographic equipment assembler          | 21110 | Physicist, sound  |
| 81320 | Photographic film and paper maker         | 31112 | Physics technician  |
| 81320 | Photographic film developer               | 21344 | Physiologist  |
| 81320 | Photographic plate maker                  | 21313 | Physiologist, animal                                      |
| 81320 | Photographic print developer              | 21312 | Physiologist, plant                                       |
| 81320 | Photographic products machine operator    | 32551 | Physiotherapist   |
| 21659 | Photographic surveyor                     | 26521 | Pianist   |
| 35219 | Photography, director of (motion picture) | 75229 | Piano case maker  |
| 73215 | Photogravure cameraman                    | 36204 | Piano instructor (extracurriculum)                        |
| 73217 | Photogravure etcher                       | 73120 | Piano maker   |
| 73215 | Photogravure photographer                 | 73120 | Piano stringer  |
| 73219 | Photogravure proofer                      | 73120 | Piano tuner   |
| 73219 | Photogravure prover                       | 73120 | Piano-accordion maker                                     |
| 73216 | Photogravure retoucher                    | 75190 | Pickler, food   |
| 34310 | Photo-journalist                          | 83299 | Pick-up driver  |
| 73215 | Photolithographer                         | 75223 | Picture frame maker                                       |
| 73229 | Photo-mechanical transferrer              | 26519 | Picture restorer  |
| 73211 | Photo-type-setting machine operator       | 75123 | Pie maker   |
| 21319 | Phycologist                               | 73139 | Piercer, precious metal                                   |
| 34223 | Physical fitness instructor               | 61210 | Pig farm worker   |
| 21462 | Physical metallurgist                     | 75111 | Pig slaughterer   |
| 31193 | Physical metallurgy technician            | 83424 | Pile-driver operator                                      |
| 32551 | Physical therapist                        | 21424 | Piling engineer   |
| 34229 | Physical trainer                          | 83424 | Piling machine operator                                   |
| 22110 | Physician (general practice)              | 31532 | Pilot, aircraft (except commercial airline and air force) |
| 22143 | Physician, emergency                      | 31531 | Pilot, commercial airline                                 |
| 22149 | Physician, industrial                     | 31523 | Pilot, harbour  |
| 22129 | Physician, infectious diseases            | 31532 | Pilot, helicopter (air transport)                         |
| 22149 | Physician, medical service (school)       | 31529 | Pilot, hovercraft   |
| 22129 | Physician, nuclear medicine               | 31532 | Pilot, seaplane   |
| 22149 | Physician, occupational                   | 31523 | Pilot, ship   |
| 22129 | Physician, osteopathic                    | 31532 | Pilot, test (aircraft)                                    |
| 22147 | Physician, public health                  | 71242 | Pipe and boiler insulator                                 |
| 22129 | Physician, rehabilitation                 | 81232 | Pipe drawer (seamless)                                    |
| 22129 | Physician, renal                          | 71262 | Pipe fitter (general)                                     |
| 22127 | Physician, respiratory                    | 71262 | Pipe fitter, gas  |
| 22129 | Physician, specialised                    | 71262 | Pipe fitter, marine                                       |
| 21110 | Physicist (general)                       | 71262 | Pipe fitter, steam  |
| 21110 | Physicist, acoustics                      | 83426 | Pipe jacking machine operator                             |
| 21110 | Physicist, electricity                    | 71263 | Pipe layer  |
| 21110 | Physicist, electronics                    | 71263 | Pipe laying jointer                                       |
| 21110 | Physicist, heat                           | 71262 | Pipe tube fitter, aircraft                                |
| 21110 | Physicist, light                          | 81139 | Pitman  |
| 21110 | Physicist, magnetism                      | 33461 | Placement officer   |
| 21110 | Physicist, mechanics                      | 81254 | Plane mill operator (metalworking)                        |
| 21110 | Physicist, optics                         | 81254 | Plane mill setter-operator                                |
|       |   | 81254 | Planing machine operator (metalworking)                   |
|       |   | 81739 | Planing machine operator (woodworking)                    |

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| 81254 | Planing machine setter-operator (metalworking) | 73219 | Plate grainer (photo-engraving)          |
| 81739 | Planing machine setter-operator (woodworking)  | 73219 | Plate grainer (photogravure)             |
| 21641 | Planner, town                                  | 73219 | Plate maker (photogravure)               |
| 21649 | Planner, traffic                               | 81320 | Plate maker, photographic                |
| 21641 | Planner, urban                                 | 73219 | Plate mounter                            |
| 21610 | Planner, urban design                          | 73219 | Plate mounter (photo-engraving)          |
| 21641 | Planner, urban land                            | 81215 | Plate roller (steel)                     |
| 43221 | Planning clerk (materials supply)              | 81241 | Plater (electroplating)                  |
| 43222 | Planning clerk (production)                    | 72132 | Plater, boilermaking                     |
| 21329 | Plant biotechnologist                          | 81242 | Plater, hot-dip                          |
| 21329 | Plant geneticist                               | 72145 | Plater, ship                             |
| 21312 | Plant histologist                              | 81243 | Plater, wire (machine)                   |
| 72339 | Plant maintenance mechanic                     | 36100 | Play school teacher                      |
| 21323 | Plant pathologist                              | 34210 | Player, football                         |
| 21312 | Plant physiologist                             | 31719 | Playground safety inspector              |
| 21312 | Plant taxonomist                               | 31719 | Playground safety officer                |
| 31422 | Plant tissue culture technician                | 26411 | Playwright                               |
| 21326 | Plant tissue culturist                         | 71261 | Plumber (general)                        |
| 21323 | Plant virologist                               | 71262 | Plumber, ship                            |
| 61900 | Planter, tree (forestry)                       | 81723 | Plywood core layer                       |
| 71230 | Plasterer                                      | 81723 | Plywood core-laying machine operator     |
| 71230 | Plasterer, ornamental                          | 75229 | Plywood grader                           |
| 71230 | Plasterer, stucco                              | 81724 | Plywood press operator                   |
| 73219 | Plastic finisher (photo-engraving)             | 72149 | Pneumatic riveter                        |
| 81420 | Plastic product making machine operator        | 83429 | Pneumatic-drill operator                 |
| 82199 | Plastic products assembler                     | 32593 | Podiatrist                               |
| 22137 | Plastic surgeon                                | 26411 | Poet                                     |
| 21130 | Plastics chemist                               | 54121 | Police constable                         |
| 81420 | Plastics compression moulding machine operator | 54123 | Police guard (private)                   |
| 81420 | Plastics extruding machine operator            | 33550 | Police inspector                         |
| 81420 | Plastics gauge and jig maker                   | 54121 | Police patrolman                         |
| 81420 | Plastics injection moulding machine operator   | 34310 | Police photographer                      |
| 81420 | Plastics laminating machine operator           | 54121 | Policeman                                |
| 81420 | Plastics laminating press operator             | 54121 | Policeman, harbour                       |
| 81420 | Plastics laminator                             | 54121 | Policeman, marine                        |
| 81420 | Plastics polisher                              | 54121 | Policeman, traffic                       |
| 81420 | Plastics product fabricator                    | 24220 | Policy analyst                           |
| 72149 | Plate bender                                   | 12130 | Policy and planning manager              |
| 94104 | Plate collector                                | 43122 | Policy clerk, insurance                  |
| 73219 | Plate finisher (photo-engraving)               | 12130 | Policy planning manager                  |
| 71250 | Plate glass fitter                             | 72249 | Polisher (metalworking)                  |
| 73159 | Plate glass polisher                           | 73132 | Polisher and cutter diamond (industrial) |
| 73159 | Plate glass rollerman                          | 73132 | Polisher and cutter, gem                 |
|       |  | 73161 | Polisher, acid (glass decorating)        |
|       |  | 91220 | Polisher, car                            |
|       |  | 72249 | Polisher, emery (metalworking)           |
|       |  | 71131 | Polisher, granite                        |
|       |  | 71131 | Polisher, marble                         |

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|-------|--|-------|---|
| 72249 | Polisher, mirror-finish<br>(metalworking)    | 81811 | Pottery and porcelain kilnman                   |
| 91220 | Polisher, motor vehicle                      | 73141 | Pottery and porcelain modeller                  |
| 81420 | Polisher, plastics                           | 73141 | Pottery and porcelain mould<br>maker            |
| 73159 | Polisher, plate glass                        | 73141 | Pottery and porcelain presser                   |
| 72249 | Polisher, sand (metalworking)                | 73141 | Pottery and porcelain thrower                   |
| 75361 | Polisher, shoe (shoemaking)                  | 73149 | Pottery and porcelain turner                    |
| 71131 | Polisher, stone                              | 73162 | Pottery artist                                  |
| 72241 | Polishing machine operator<br>(metalworking) | 73149 | Pottery driller                                 |
| 73155 | Polishing machine operator, lens             | 73141 | Pottery worker                                  |
| 26332 | Political philosopher                        | 61221 | Poultry breeder                                 |
| 26332 | Political scientist                          | 75119 | Poultry dresser                                 |
| 81420 | Polyfoam product making<br>machine operator  | 61221 | Poultry farm worker (general)                   |
| 21130 | Polymers chemist                             | 61221 | Poultry farmer                                  |
| 23102 | Polytechnic teacher                          | 61222 | Poultry hatcher and breeder                     |
| 81420 | Polythene bag making machine<br>operator     | 61222 | Poultry hatchery worker                         |
| 71261 | Pool and filtration system worker            | 61223 | Poultry inseminator                             |
| 26524 | Popular music singer                         | 75111 | Poultry slaughterer                             |
| 31574 | Port and shipping operations<br>supervisor   | 31423 | Poultry technical officer                       |
| 31592 | Port captain                                 | 81219 | Pourer, metal                                   |
| 31591 | Port master, dry dock                        | 21512 | Power distribution and<br>transmission engineer |
| 13243 | Port operations manager                      | 31132 | Power distribution technician<br>(electricity)  |
| 31574 | Port operations supervisor                   | 81860 | Power generating plant operator                 |
| 96213 | Porter (airport)                             | 21512 | Power generation engineer                       |
| 96213 | Porter, baggage (except hotel)               | 31132 | Power generation technician<br>(electricity)    |
| 96212 | Porter, baggage (hotel)                      | 81860 | Power plant boilerman                           |
| 96212 | Porter, hall (hotel)                         | 81852 | Power plant operator<br>(compressed air)        |
| 96212 | Porter, hotel baggage                        | 81860 | Power plant operator, electricity<br>generating |
| 96213 | Porter, railway                              | 81860 | Power plant operator,<br>hydroelectric          |
| 93334 | Porter, warehouse                            | 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<br>(electricity)  |
| 13244 | Postal service operations<br>manager         | 22110 | Practitioner, general                           |
| 51601 | Postal service supervisor                    | 22110 | Practitioner, medical (general)                 |
| 83223 | Postal van driver                            | 62211 | Prawn farm worker                               |
| 34391 | Poster artist                                | 62211 | Prawn farmer                                    |
| 51602 | Postman                                      | 39910 | Preacher (non-ordained)                         |
| 13244 | Postmaster                                   | 71149 | Precast concrete erectors                       |
| 73141 | Potter (general)                             | 73139 | Precious metal cutter                           |
| 81819 | Potter's millman                             | 73139 | Precious metal driller                          |
| 73141 | Pottery and porcelain caster                 | 73139 | Precious metal leaf maker                       |
| 73141 | Pottery and porcelain die-presser            | 73139 | Precious metal piercer                          |
| 73141 | Pottery and porcelain jiggerman              |       |   |
| 73141 | Pottery and porcelain jollier                |       |   |

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| 73139 | Precious metal roller                                   | 91210 | Presser, steam (laundry service)                |
| 73139 | Precious metal spinner                                  | 81591 | Pressing machine operator (laundry service)     |
| 81257 | Precision grinding machine operator                     | 81819 | Pressing machine operator, glass                |
| 81257 | Precision grinding machine setter-operator              | 81719 | Pressman (hardboard)                            |
| 31196 | Precision optics technician                             | 81841 | Pressman, lithographic                          |
| 81732 | Precision wood sawyer                                   | 81841 | Pressman, offset                                |
| 71199 | Prefabricated building section assembler                | 81652 | Pressman, oil (edible oils)                     |
| 71199 | Prefabricated building section erector                  | 81841 | Pressman, printing                              |
| 71199 | Prefabricated building section fixer                    | 81841 | Pressman, wallpaper printing                    |
| 12191 | Premises and facilities maintenance manager             | 23300 | Pre-university teacher                          |
| 12191 | Premises maintenance manager                            | 33599 | Price inspector                                 |
| 31601 | Premises maintenance officer                            | 29011 | Priest  |
| 75390 | Preparer, fibre   | 23400 | Primary school teacher                          |
| 75190 | Preparer, tobacco                                       | 11110 | Prime minister                                  |
| 36100 | Pre-primary school teacher                              | 83322 | Prime mover driver                              |
| 11110 | President (government)                                  | 13459 | Principal, kindergarten                         |
| 11203 | President, company                                      | 13451 | Principal, school                               |
| 81890 | Press baling machine operator                           | 81320 | Print developer, photographic                   |
| 26422 | Press editor  | 73221 | Printer, batik                                  |
| 33450 | Press liaison officer                                   | 73221 | Printer, block                                  |
| 81652 | Press operator (edible oils)                            | 81320 | Printer, film                                   |
| 81651 | Press operator (fruit juice extraction)                 | 81320 | Printer, photographic                           |
| 81432 | Press operator, cardboard                               | 81320 | Printer, projection (photography)               |
| 81625 | Press operator, chocolate making                        | 73221 | Printer, silk screen                            |
| 81819 | Press operator, clay filtering                          | 73221 | Printer, textile                                |
| 81431 | Press operator, cutting and creasing (paper box)        | 81841 | Printer, wallpaper                              |
| 81259 | Press operator, metal (except forging or plate bending) | 44191 | Printer's proof reader                          |
| 81259 | Press operator, metal bending                           | 33399 | Printing broker                                 |
| 81420 | Press operator, plastics laminating                     | 73219 | Printing engraver (metal plate, roller and die) |
| 81724 | Press operator, plywood                                 | 73214 | Printing engraver, photogravure                 |
| 81419 | Press operator, rubber embossing                        | 73219 | Printing etcher (metal plate or roller)         |
| 81419 | Press operator, rubber moulding                         | 73217 | Printing etcher (photogravure)                  |
| 81549 | Press operator, steam (textile)                         | 81841 | Printing machine operator                       |
| 81660 | Press operator, sugar beet                              | 81320 | Printing machine operator, photograph           |
| 81549 | Press operator, textile                                 | 72339 | Printing machinery fitter                       |
| 81419 | Press operator, tyre moulding                           | 72339 | Printing machinery fitter-assembler             |
| 34310 | Press photographer                                      | 72333 | Printing machinery mechanic                     |
| 72221 | Press tool maker  | 73211 | Printing maker-up                               |
| 91210 | Presser (laundry service)                               | 73219 | Printing plate retoucher                        |
| 73141 | Presser, pottery and porcelain                          | 81841 | Printing press feeder                           |
|       |   | 81841 | Printing pressman                               |
|       |   | 81841 | Printing pressman, wallpaper                    |
|       |   | 73219 | Printing roller engraver                        |
|       |   | 73229 | Printing transferrer, lithographic              |
|       |   | 54130 | Prison guard                                    |
|       |   | 54130 | Prison warden                                   |

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| 26351 | Prison welfare worker                         | 25140 | Programmer, applications                |
| 33493 | Private banking operations executive          | 25123 | Programmer, multimedia                  |
| 54191 | Private inquiry agent                         | 25140 | Programmer, systems                     |
| 54191 | Private investigator                          | 25140 | Programmer, technical                   |
| 32202 | Private nurse                                 | 13231 | Project manager (construction)          |
| 54123 | Private police guard                          | 13301 | Project manager, information technology |
| 36910 | Private tutor (academic)                      | 81320 | Projection printer (photography)        |
| 36910 | Private tutor (pre-university education)      | 59001 | Projectionist, cinema                   |
| 44170 | Probate clerk                                 | 52421 | Promoter, sales                         |
| 26120 | Probate judge                                 | 44191 | Proof reader                            |
| 26352 | Probation officer                             | 73219 | Proofer, photogravure                   |
| 31144 | Process instrumentation technician            | 73211 | Proof-pressman                          |
| 81871 | Process pumper (petroleum refining)           | 33340 | Property agent                          |
| 51603 | Process server                                | 31601 | Property management executive           |
| 33232 | Procurement agent                             | 12191 | Property manager                        |
| 21499 | Procurement engineer                          | 33340 | Property salesman                       |
| 13242 | Procurement manager                           | 26113 | Prosecutor, public                      |
| 26544 | Producer of commercials                       | 32141 | Prosthetic technician                   |
| 26541 | Producer, computer games                      | 32141 | Prosthetist                             |
| 61221 | Producer, egg (farm)                          | 73219 | Prover, photo-engraving                 |
| 26541 | Producer, motion picture                      | 73219 | Prover, photogravure                    |
| 26541 | Producer, radio and television                | 92143 | Pruner and trimmer, tree                |
| 26541 | Producer, stage                               | 22128 | Psychiatrist                            |
| 26541 | Producer, theatrical                          | 26340 | Psychologist                            |
| 24139 | Product structurer, financial                 | 26340 | Psychologist, clinical                  |
| 34399 | Product stylist                               | 26340 | Psychologist, educational               |
| 35219 | Production assistant                          | 26340 | Psychologist, forensic                  |
| 43151 | Production co-ordinator (computer operations) | 26340 | Psychologist, industrial                |
| 26543 | Production designer (film)                    | 26340 | Psychologist, occupational              |
| 26543 | Production designer (stage)                   | 26340 | Psychologist, research                  |
| 26543 | Production designer (studio)                  | 26340 | Psychologist, social                    |
| 21412 | Production engineer                           | 24111 | Public accountant                       |
| 31006 | Production engineer, assistant                | 59009 | Public address equipment operator       |
| 31172 | Production engineering technician             | 32201 | Public health nurse                     |
| 13231 | Production manager (construction)             | 32522 | Public health nutritionist              |
| 13101 | Production manager (farm)                     | 22147 | Public health physician                 |
| 13211 | Production manager (manufacturing)            | 22500 | Public health veterinarian              |
| 43222 | Production planning clerk                     | 33450 | Public information officer              |
| 33499 | Production/Materials planner                  | 33450 | Public liaison officer                  |
| 32201 | Professional nurse (general)                  | 43142 | Public opinion collector                |
| 34210 | Professional sportsman                        | 26113 | Public prosecutor                       |
| 52499 | Programme salesman (theatre)                  | 24320 | Public relation consultant              |
| 25140 | Programmer, analyst                           | 41109 | Public relations assistant              |
|       |   | 41109 | Public relations clerk                  |
|       |   | 12220 | Public relations manager                |
|       |   | 33450 | Public relations officer                |
|       |   | 33229 | Publications sales representative       |
|       |   | 33450 | Publicity man                           |
|       |   | 12220 | Publicity manager                       |

81819 Pug mill operator, clay  
 26120 Puisne judge  
 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  
 22149 Radiation oncologist  
 32112 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  
 34411 Radio announcer  
 26542 Radio director  
 26545 Radio editor  
 21524 Radio engineer  
 31143 Radio engineering technician  
 34411 Radio news reader  
 35233 Radio officer, ship's  
 35234 Radio operator, flight  
 34411 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  
 32111 Radiographer, medical diagnostic  
 32114 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  
 83121 Railway brakeman

|       |  |       |  |
|-------|--|-------|--|
| 91293 | Railway carriage cleaner               | 32560 | Recreational therapist                                 |
| 21429 | Railway construction engineer          | 81860 | Rectifier operator (electric current)                  |
| 51312 | Railway dining car waiter              | 29011 | Rector   |
| 83129 | Railway engine driver                  | 81512 | Reeler (thread and yarn)                               |
| 81829 | Railway engine fireman                 | 34224 | Referee (sports)                                       |
| 83129 | Railway gateman                        | 81625 | Refiner (chocolate making)                             |
| 33311 | Railway goods agent                    | 31192 | Refining and smelting technician                       |
| 93332 | Railway loader                         | 81653 | Refining machine operator (oils and fats)              |
| 96213 | Railway porter                         | 32542 | Refracting optician                                    |
| 31579 | Railway service supervisor             | 71244 | Refractory worker                                      |
| 83121 | Railway shunter                        | 52492 | Refreshments salesman (cinema or theatre)              |
| 83121 | Railway signalman                      | 81619 | Refrigerating process worker (foodstuffs)              |
| 31599 | Railway station master                 | 71243 | Refrigeration and air-conditioning equipment insulator |
| 81829 | Railway steam engine fireman           | 71272 | Refrigeration and air-conditioning plant installer     |
| 31599 | Railway superintendent (MRT)           | 21447 | Refrigeration engineer                                 |
| 31579 | Railway transport service inspector    | 31154 | Refrigeration engineering technician                   |
| 54199 | Ranger, forest                         | 71272 | Refrigeration equipment erector                        |
| 54194 | Ranger, park                           | 81855 | Refrigeration system operator                          |
| 75291 | Rattan furniture maker                 | 96111 | Refuse collector                                       |
| 81315 | Rayon spinner                          | 81859 | Refuse disposal furnaceman                             |
| 81860 | Reactor operator (nuclear power plant) | 81859 | Refuse disposal incinerator operator                   |
| 96292 | Reader, meter                          | 96112 | Refuse sorter  |
| 44191 | Reader, printer's proof                | 83329 | Refuse truck driver                                    |
| 44191 | Reader, proof                          | 13459 | Registrar (institution of higher learning)             |
| 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 concrete (general)                          |
| 81255 | Reamer setter-operator (metalworking)  | 72142 | Reinforcing iron worker                                |
| 81419 | Rebuilder, tyre                        | 71149 | Reinforcing wire mesh worker (concrete)                |
| 81419 | Recapper, tyre                         | 36991 | Relief teacher   |
| 43219 | Receiving and despatching clerk        | 43114 | Remittance clerk                                       |
| 42241 | Receptionist (general)                 | 81419 | Remoulder, tyre  |
| 42243 | Receptionist, clinic                   | 93339 | Removal man  |
| 42243 | Receptionist, dentist's                | 22129 | Renal physician  |
| 42243 | Receptionist, doctor's                 | 13232 | Renovation contractor (working proprietor)             |
| 42242 | Receptionist, hotel                    | 42149 | Rent collector   |
| 42243 | Receptionist, medical                  |       |  |
| 35219 | Recording tester                       |       |  |
| 41103 | Records clerk (personnel department)   |       |  |
| 43211 | Records clerk (stock control)          |       |  |
| 40000 | Records section supervisor (office)    |       |  |
| 91139 | Recreation centre cleaner              |       |  |

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|-------|---|-------|---|
| 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                                  | 81311 | Resin compounder (chemical and related processes) |
| 73119 | Repairer, camera                                    | 22127 | Respiratory physician                             |
| 73112 | Repairer, clock and watch                           | 51311 | Restaurant captain                                |
| 72339 | Repairer, coin machine                              | 52302 | Restaurant cashier                                |
| 73119 | Repairer, dental instrument                         | 51202 | Restaurant cook                                   |
| 32143 | Repairer, dental prosthesis                         | 14123 | Restaurant keeper (working proprietor)            |
| 72339 | Repairer, dispensing machine                        | 14121 | Restaurant manager                                |
| 74123 | Repairer, electrical (household appliance)          | 14123 | Restaurateur (working proprietor)                 |
| 75390 | Repairer, fabrics                                   | 26519 | Restorer, painting                                |
| 75363 | Repairer, footwear                                  | 26519 | Restorer, picture                                 |
| 74123 | Repairer, household appliance (electrical)          | 96259 | Rest-room attendant                               |
| 73131 | Repairer, jewellery                                 | 52202 | Retail assistant                                  |
| 73113 | Repairer, optical instrument                        | 14203 | Retail dealer (working proprietor)                |
| 32142 | Repairer, orthopaedic appliance                     | 14201 | Retail manager                                    |
| 72339 | Repairer, pedal-cycle                               | 22621 | Retail pharmacist                                 |
| 72249 | Repairer, saw                                       | 14201 | Retail trade manager                              |
| 73119 | Repairer, scientific, surgical or dental instrument | 52202 | Retail trade salesman                             |
| 75363 | Repairer, shoe                                      | 14203 | Retailer (working proprietor)                     |
| 72133 | Repairer, vehicle body                              | 81811 | Retort kilnman (brick and tile)                   |
| 72339 | Repairer, vending machine                           | 73216 | Retoucher, photogravure                           |
| 73120 | Repairer, violin                                    | 73219 | Retoucher, printing plate                         |
| 73112 | Repairer, watch and clock                           | 71329 | Retoucher-painter (manufacturing)                 |
| 26421 | Reporter  | 81419 | Retreader, tyre                                   |
| 41202 | Reporter, court                                     | 81215 | Reversing mill roller (cold steel)                |
| 26421 | Reporter, crime                                     | 81626 | Revolving pan operator (sugar confectionery)      |
| 26421 | Reporter, fashion                                   | 74129 | Rheostat fitter                                   |
| 26421 | Reporter, newspaper                                 | 22129 | Rheumatologist                                    |
| 41202 | Reporter, shorthand verbatim                        | 61900 | Rice farm worker                                  |
| 26421 | Reporter, sports                                    | 61900 | Rice farmer                                       |
| 41202 | Reporter, verbatim                                  | 81630 | Rice miller                                       |
| 33392 | Representative, advertising                         | 93310 | Rider, bicycle or tricycle (not motorised)        |
| 11121 | Representative, diplomatic (government)             | 72155 | Rigger, aircraft                                  |
| 33223 | Representative, medical sales                       | 72159 | Rigger, cable railway                             |
| 33223 | Representative, pharmaceutical                      | 72153 | Rigger, hoist (construction)                      |
| 21212 | Research analyst, operations                        | 72151 | Rigger, hoisting equipment (general)              |
| 26323 | Research analyst, social                            | 72156 | Rigger, oil and gas well drilling                 |
| 12230 | Research and development manager                    | 71191 | Rigger, scaffolding                               |
| 33492 | Research officer (non-statistical)                  |       |   |
| 33142 | Research officer (statistical)                      |       |   |
| 26340 | Research psychologist                               |       |   |

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|-------|--|-------|---------------------------------------|
| 72154 | Rigger, ship   | 81215 | Roller, continuous mill (steel)       |
| 72159 | Rigger, ski-lift   | 81215 | Roller, hot-rolling (steel)           |
| 24132 | Risk analyst (financial)                                     | 81215 | Roller, non-ferrous metals            |
| 24132 | Risk management manager                                      | 81215 | Roller, plate (steel)                 |
| 24132 | Risk manager (financial)                                     | 73139 | Roller, precious metal                |
| 72149 | Rivet catcher  | 81215 | Roller, reversing mill (cold steel)   |
| 72149 | Rivet heater   | 81215 | Roller, seamless pipe and tube        |
| 81259 | Rivet maker  | 81215 | Roller, sheet (steel)                 |
| 72149 | Riveter  | 81215 | Roller, slabbing mill                 |
| 72149 | Riveter, machine   | 81215 | Roller, steel (cold)                  |
| 72149 | Riveter, pneumatic   | 81626 | Roller, sugar confectionery           |
| 93332 | Road and railway vehicle loader                              | 81215 | Roller, tandem mill (cold steel)      |
| 13232 | Road building contractor (working proprietor)                | 81652 | Rollerman (edible oil processing)     |
| 21429 | Road construction engineer                                   | 81630 | Rollerman (grain milling)             |
| 71000 | Road construction supervisor and general foreman             | 81630 | Rollerman (mustard milling)           |
| 81233 | Road extruder operator                                       | 73159 | Rollerman (plate glass)               |
| 83425 | Road grader and scraper operator                             | 81630 | Rollerman (rice milling)              |
| 93100 | Road maintenance labourer                                    | 81630 | Rollerman (spice milling)             |
| 83425 | Road making machine operator                                 | 81215 | Rolling mill stands tender            |
| 31573 | Road passenger transport service inspector                   | 71210 | Roofer, metal                         |
| 83425 | Road roller operator   | 71210 | Roofer, slate and tile                |
| 83425 | Road spreading plant operator                                | 71210 | Roofer, tile and slate                |
| 83425 | Road surface laying machine operator                         | 71250 | Roofing glazier                       |
| 31599 | Road transport depot superintendent                          | 91121 | Room steward (hotel)                  |
| 31573 | Road transport service supervisor                            | 72152 | Rope and cable splicer (general)      |
| 93332 | Road vehicle loader  | 81131 | Rotary driller (oil and gas wells)    |
| 81312 | Roaster (chemical and related processes)                     | 81313 | Rotary drum filterer                  |
| 81312 | Roaster, chemicals   | 81722 | Rotary veneer machine operator        |
| 81678 | Roasting machine operator, cocoa bean                        | 81259 | Router operator (metalworking)        |
| 81678 | Roasting machine operator, coffee bean                       | 81259 | Router setter-operator (metalworking) |
| 21449 | Robotics engineer  | 43239 | Routing clerk (freight)               |
| 31179 | Robotics technician  | 75390 | Rover, fibre                          |
| 81149 | Rock crusher operator  | 81890 | Rubber baling press operator          |
| 81214 | Rod casting machine operator, continuous (non-ferrous metal) | 81419 | Rubber calender operator              |
| 73159 | Rod maker, glass   | 21130 | Rubber chemist                        |
| 75401 | Rodent exterminator  | 81419 | Rubber coating machine operator       |
| 93100 | Rodman (surveying)   | 81419 | Rubber compounder                     |
| 83425 | Roller driver (road construction)                            | 81419 | Rubber dipping machine operator       |
| 81629 | Roller plant operator (dried milk)                           | 81419 | Rubber embossing machine operator     |
| 81215 | Roller, bar mill   | 81419 | Rubber extruding machine operator     |
| 81215 | Roller, cold (steel)   | 61900 | Rubber farmer                         |
|       |  | 82199 | Rubber goods assembler                |
|       |  | 81412 | Rubber laminating machine operator    |
|       |  | 81411 | Rubber millman                        |
|       |  | 81411 | Rubber mixing mill operator           |
|       |  | 81419 | Rubber moulding-press operator        |
|       |  | 61900 | Rubber plantation worker              |

61900 Rubber planter  
 93209 Rubber sheets clipper and sorter  
 75409 Rubber stamp maker  
 61900 Rubber tapper  
 75299 Rush matting maker

## S

75369 Saddler  
 41109 Safe deposit clerk  
 21493 Safety engineer (industrial)  
 81811 Saggur 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  
 33222 Sales engineer, computer  
 33222 Sales engineer, technical  
 12211 Sales manager  
 33290 Sales organiser (regional or overseas)  
 52421 Sales promoter  
 33223 Sales representative (medical and pharmaceutical products)  
 33222 Sales representative, computer  
 33224 Sales representative, information and communications technology  
 33211 Sales representative, insurance  
 33229 Sales representative, manufacturer's  
 52202 Sales representative, motor vehicle  
 33223 Sales representative, pharmaceutical  
 33229 Sales representative, publications  
 33229 Sales representative, sports products  
 33222 Sales representative, technical  
 33222 Sales representative, technical equipment  
 52201 Sales supervisor  
 33392 Salesman (broadcasting time)  
 33399 Salesman (leasing of vehicles)

33392 Salesman, advertising  
 33111 Salesman, bonds  
 52422 Salesman, door-to-door  
 33222 Salesman, engineering  
 33211 Salesman, insurance  
 52422 Salesman, outdoor  
 52499 Salesman, programme (theatre)  
 33340 Salesman, property  
 33340 Salesman, real estate  
 52492 Salesman, refreshments (cinema or theatre)  
 52202 Salesman, retail trade  
 33111 Salesman, securities  
 33222 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  
 96259 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)

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|-------|--|-------|---|
| 81732 | Sawyer, frame precision (wood)                       | 83502 | Seaman, ordinary                                    |
| 81732 | Sawyer, precision (wood)                             | 81522 | Seamless hosiery knitting machine operator          |
| 81721 | Sawyer, sawmill (general)                            | 81232 | Seamless pipe and tube drawer                       |
| 26521 | Saxophonist  | 81215 | Seamless pipe and tube roller                       |
| 71191 | Scaffolder   | 31532 | Seaplane pilot                                      |
| 71191 | Scaffolding rigger                                   | 75211 | Seasoner (wood)                                     |
| 26419 | Scenario writer                                      | 51390 | Seater (catering service)                           |
| 34324 | Scenery designer                                     | 31512 | Second engineer (ship)                              |
| 71329 | Scenery painter (stage set)                          | 31522 | Second mate (ship)                                  |
| 43221 | Schedule clerk (material planning)                   | 23300 | Secondary school teacher                            |
| 43222 | Schedule clerk (production planning)                 | 23200 | Secretarial school teacher                          |
| 43151 | Scheduler (computer operations)                      | 12112 | Secretary, company (executive)                      |
| 96259 | School attendant                                     | 11121 | Secretary, embassy (Singapore diplomatic officer)   |
| 13459 | School cluster superintendent                        | 34129 | Secretary, organising (community centre)            |
| 26357 | School counsellor                                    | 41201 | Secretary, stenographic                             |
| 32511 | School dental nurse                                  | 33111 | Securities broker                                   |
| 13451 | School principal                                     | 43123 | Securities clerk                                    |
| 13451 | School vice principal                                | 33111 | Securities dealer                                   |
| 73151 | Scientific glass blower                              | 33111 | Securities sales representative                     |
| 73119 | Scientific instrument maker and repairer             | 33111 | Securities salesman                                 |
| 34310 | Scientific photographer                              | 41109 | Security administrator                              |
| 26332 | Scientist, political                                 | 41109 | Security administrator assistant                    |
| 72249 | Scissors sharpener (itinerant)                       | 54140 | Security guard (private)                            |
| 83439 | Scoop-truck operator                                 | 54140 | Security officer                                    |
| 75390 | Scourer, wool fibre                                  | 54140 | Security patrolman                                  |
| 81890 | Scrap baling press operator                          | 54199 | Security screening officer                          |
| 83425 | Scraper and grader operator (construction)           | 25240 | Security specialist, information technology         |
| 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   |       |   |
| 83502 | Seaman, able   |       |   |

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|-------|--|-------|--|
| 11150 | Senior official of workers' organisation       | 81259 | Shearing machine setter-operator                           |
| 81630 | Separating machine operator (grain milling)    | 61210 | Sheep shearer  |
| 81313 | Separator operator, centrifugal                | 72139 | Sheet metal marker   |
| 83509 | Serang   | 81259 | Sheet metal spinner  |
| 32120 | Serology technician                            | 72139 | Sheet metal worker (copper)                                |
| 96253 | Servant, hospital                              | 72131 | Sheet metal worker (general)                               |
| 51603 | Server, notice                                 | 72139 | Sheet metal worker (tin)                                   |
| 51603 | Server, process                                | 72139 | Sheet metal worker, aircraft                               |
| 51603 | Server, summons                                | 72139 | Sheet metal worker, furniture                              |
| 51121 | Service assistant, rail station                | 72139 | Sheet metal worker, ornamental                             |
| 72321 | Service mechanic (aircraft engine)             | 72133 | Sheet metal worker, vehicle                                |
| 52491 | Service station attendant (automobiles)        | 81215 | Sheet roller (steel)                                       |
| 34324 | Set decorator (motion pictures)                | 93209 | Sheet rubber maker   |
| 34324 | Set designer                                   | 33312 | Ship agent   |
| 71329 | Set painter (motion picture)                   | 72144 | Ship beam and frame erector                                |
| 81859 | Sewage plant operator                          | 33242 | Ship broker  |
| 81842 | Sewer, bookbinding (machine)                   | 31521 | Ship captain   |
| 75390 | Sewer, fur                                     | 71151 | Ship carpenter   |
| 81531 | Sewer, hat and cap (machine)                   | 31593 | Ship charterer   |
| 75364 | Sewer, leather                                 | 91291 | Ship cleaner   |
| 75343 | Sewer, mattress                                | 21444 | Ship construction engineer                                 |
| 75390 | Sewer, sail                                    | 33464 | Ship crewing officer                                       |
| 75361 | Sewer, shoe                                    | 74110 | Ship electrician   |
| 75390 | Sewer, tent                                    | 31512 | Ship engineer officer                                      |
| 21432 | Sewerage engineer                              | 72149 | Ship frame bender and turner                               |
| 81531 | Sewing machine operator (general)              | 71321 | Ship hull and structural steel painter                     |
| 81842 | Sewing machine operator, book                  | 71152 | Ship joiner  |
| 75361 | Sewing machine operator, sole (shoemaking)     | 93331 | Ship loader  |
| 81256 | Shaping machine operator (metalworking)        | 81823 | Ship motorman  |
| 81739 | Shaping machine operator (woodworking)         | 31523 | Ship pilot   |
| 81256 | Shaping machine setter-operator (metalworking) | 72145 | Ship plater  |
| 81739 | Shaping machine setter-operator (woodworking)  | 71262 | Ship plumber   |
| 33111 | Sharebroker                                    | 72154 | Ship rigger  |
| 72249 | Sharpener, cutting instrument                  | 91291 | Ship tank cleaner  |
| 72242 | Sharpener, edge tool                           | 72000 | Ship-building and repairing supervisor and general foreman |
| 72249 | Sharpener, knife (itinerant)                   | 31521 | Shipmaster   |
| 72249 | Sharpener, saw                                 | 33311 | Shipping agent   |
| 72249 | Sharpener, scissors (itinerant)                | 43231 | Shipping clerk   |
| 61210 | Shearer, sheep                                 | 43231 | Shipping clerk (freight)                                   |
| 81259 | Shearing machine operator (metal cutting)      | 31574 | Shipping operations supervisor                             |
|       |  | 31511 | Ship's chief engineer                                      |
|       |  | 51111 | Ship's chief steward                                       |
|       |  | 51202 | Ship's cook  |
|       |  | 31512 | Ship's engineer  |
|       |  | 72339 | Ship's engine-room mechanic                                |
|       |  | 81829 | Ship's engine-room rating                                  |
|       |  | 81822 | Ship's fireman   |
|       |  | 71329 | Ship's interior painter                                    |
|       |  | 31522 | Ship's mate  |

|       |   |       |   |
|-------|---|-------|---|
| 31522 | Ship's navigating officer                             | 21519 | Signal systems engineer<br>(electrical)     |
| 81823 | Ship's oiler and greaser                              | 21529 | Signal systems engineer<br>(electronic)     |
| 35233 | Ship's radio officer                                  | 31139 | Signal systems technician<br>(electrical)   |
| 51112 | Ship's steward  | 31149 | Signal systems technician<br>(electronic)   |
| 81822 | Ship's stocker  | 72153 | Signaller and rigger<br>(construction)      |
| 72144 | Shipwright, metal                                     | 74129 | Signalling equipment fitter<br>(electrical) |
| 71151 | Shipwright, wood                                      | 74221 | Signalling equipment fitter<br>(electronic) |
| 72000 | Shipyards foreman                                     | 83121 | Signalman, railway                          |
| 13291 | Shipyards manager                                     | 73221 | Silk screen printer                         |
| 75361 | Shoe cutter   | 81630 | Silksman (grain milling)                    |
| 75361 | Shoe finisher   | 73162 | Silverer, glass                             |
| 75361 | Shoe pattern-maker                                    | 73162 | Silverer, mirror                            |
| 75361 | Shoe polisher (shoemaking)                            | 73133 | Silversmith                                 |
| 75363 | Shoe repairer   | 31429 | Silvicultural technician                    |
| 75361 | Shoe sewer  | 21329 | Silviculturist                              |
| 75361 | Shoemaker   | X3000 | Singapore Armed Forces                      |
| 75362 | Shoemaker (orthopaedic)                               | 81549 | Singeing machine operator                   |
| 75361 | Shoemaker, bespoke                                    | 26524 | Singer                                      |
| 81139 | Shooter (oil and gas wells)                           | 26524 | Singer, alto                                |
| 52202 | Shop assistant  | 26524 | Singer, concert                             |
| 52202 | Shop sales assistant                                  | 26524 | Singer, jazz                                |
| 14201 | Shop sales manager                                    | 26524 | Singer, opera                               |
| 14203 | Shopkeeper  | 26524 | Singer, popular music                       |
| 71290 | Shorer (construction)                                 | 36204 | Singing instructor<br>(extracurriculum)     |
| 41311 | Shorthand typist (general)                            | 36204 | Singing teacher (private tuition)           |
| 41202 | Shorthand verbatim reporter                           | 22301 | Sinseh                                      |
| 26411 | Short-story writer                                    | 32201 | 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<br>trade)                 | 71210 | Slate and tile roofer                       |
| 52201 | Showroom supervisor (wholesale<br>trade)              | 75111 | Slaughterer                                 |
| 81311 | Shredder operator (chemical and<br>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                                   | 35290 | Slots technician                            |
| 81660 | Sieve operator, sugar                                 | 81811 | Smelter, glass making                       |
| 51131 | Sightseeing guide                                     |       |   |
| 39102 | Sign language interpreter                             |       |   |
| 71323 | Sign painter  |       |   |
| 74129 | Signage installer (electronic)                        |       |   |
| 71290 | Signage installer (non-electronic)                    |       |   |

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|-------|--|-------|---|
| 93209 | Smokehouse attendant                                 | 51201 | Sous chef                                 |
| 93209 | Smokehouse labourer (rubber)                         | 34210 | Sparring partner (boxing)                 |
| 75119 | Smokehouseman (fish and meat)                        | 34210 | Sparring partner (others)                 |
| 75119 | Smoker, fish   | 33219 | Special agent (group insurance systems)   |
| 75119 | Smoker, meat   | 22612 | Specialised dentist                       |
| 75229 | Smoking pipe maker                                   | 22129 | Specialised physician                     |
| 14123 | Snack-bar keeper (working proprietor)                | 22139 | Specialised surgeon                       |
| 81332 | Soap making machine operator                         | 23511 | Specialist, educational assessment        |
| 33592 | Social benefits officer                              | 31711 | Specialist, fire prevention               |
| 51991 | Social escort  | 54110 | Specialist, fire salvage                  |
| 26321 | Social pathologist                                   | 23512 | Specialist, teaching aid                  |
| 26340 | Social psychologist                                  | 23512 | Specialist, visual teaching aid           |
| 26323 | Social research analyst                              | 51202 | Specialty cook                            |
| 26323 | Social studies researcher                            | 36206 | Speech instructor (extracurriculum)       |
| 26351 | Social welfare caseworker                            | 32532 | Speech pathologist                        |
| 13440 | Social welfare manager                               | 36206 | Speech teacher (private tuition)          |
| 26351 | Social welfare worker                                | 32532 | Speech therapist                          |
| 26351 | Social worker (general)                              | 81630 | Spice miller                              |
| 26352 | Social worker, delinquency prevention                | 81630 | Spice milling machine operator            |
| 26353 | Social worker, medical                               | 81259 | Spinner, metal                            |
| 26321 | Sociologist  | 81315 | Spinner, nylon                            |
| 81522 | Sock knitting machine operator                       | 73139 | Spinner, precious metal                   |
| 75349 | Soft furnishings maker                               | 81315 | Spinner, rayon                            |
| 13302 | Software and applications manager                    | 81259 | Spinner, sheet metal                      |
| 25121 | Software developer                                   | 81315 | Spinner, synthetic fibre                  |
| 25121 | Software engineer                                    | 81511 | Spinner, thread and yarn                  |
| 21312 | Soil botanist  | 81511 | Spinning frame operator (thread and yarn) |
| 21424 | Soil mechanics engineer                              | 81259 | Spinning-lathe operator (metalworking)    |
| 21324 | Soil scientist                                       | 72152 | Splicer, rope and cable (general)         |
| 72121 | Solderer   | 81512 | Spooler (thread and yarn)                 |
| 75361 | Sole fitter  | 33399 | Sports agent                              |
| 75361 | Sole sewing machine operator                         | 34412 | Sports announcer (television)             |
| 26111 | Solicitor  | 14310 | Sports centre manager                     |
| 44170 | Solicitor's clerk                                    | 34221 | Sports coach                              |
| 32113 | Sonographer  | 91139 | Sports complex cleaner                    |
| 26524 | Soprano  | 32521 | Sports dietitian                          |
| 96299 | Sorter, bottle (hand)                                | 26422 | Sports editor                             |
| 59009 | Sound amplifying equipment operator (public address) | 75229 | Sports equipment maker (wood)             |
| 35219 | Sound editor (motion picture film)                   | 33320 | Sports event organiser                    |
| 35219 | Sound mixer  | 33320 | Sports event planner                      |
| 21110 | Sound physicist                                      | 92149 | Sports grounds keeper                     |
| 71249 | Sound proofing insulator                             | 34221 | Sports instructor                         |
| 35215 | Sound recording equipment operator                   | 26113 | Sports legal officer                      |
| 74212 | Sound reproducing and recording equipment mechanic   | 32552 | Sports masseur                            |
| 73120 | Sound-board maker (piano)                            | 34224 | Sports official                           |
|       |  | 34310 | Sports photographer                       |

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|-------|--|-------|---|
| 22149 | Sports physician                                       | 52120 | Stall holder (prepared food or drinks)            |
| 32551 | Sports physiotherapist                                 | 52190 | Stall sales worker                                |
| 34411 | Sports presenter (radio)                               | 75409 | Stamp maker (rubber)                              |
| 34412 | Sports presenter (television)                          | 81259 | Stamping press operator                           |
| 33229 | Sports products sales representative                   | 81849 | Stapling machine operator                         |
| 26340 | Sports psychologist                                    | 34224 | Starter (sports)                                  |
| 26421 | Sports reporter  | 42149 | Station assistant, MRT (fare collection)          |
| 32551 | Sports trainer   | 31599 | Station master, bus                               |
| 35212 | Sports video camera operator                           | 31599 | Station master, MRT                               |
| 32522 | Sports, nutritionist                                   | 31599 | Station master, railway                           |
| 34210 | Sportsman, professional                                | 81851 | Stationary engine operator (general)              |
| 81312 | Spray drier operator (chemical and related processes)  | 83431 | Stationary jib-crane operator                     |
| 71311 | Spray painter (building)                               | 81000 | Stationary machine supervisor and general foreman |
| 73162 | Spray painter (ceramics)                               | 43141 | Statistical assistant (general)                   |
| 71324 | Spray painter (except ships, motor vehicles and signs) | 43141 | Statistical clerk (general)                       |
| 71329 | Spray painter (motor vehicle assembly)                 | 43149 | Statistical coder                                 |
| 71322 | Spray painter (motor vehicle)                          | 33141 | Statistical officer                               |
| 73162 | Spray painting decorator (ceramics)                    | 33149 | Statistical technician                            |
| 81629 | Spray plant operator (dried milk)                      | 21220 | Statistician                                      |
| 81245 | Sprayer, metal   | 21220 | Statistician, applied statistics                  |
| 83425 | Spreader operator (concrete paving)                    | 21220 | Statistician, economics                           |
| 81259 | Spring maker   | 21220 | Statistician, education                           |
| 72111 | Squeeze machine moulder                                | 21220 | Statistician, finance                             |
| 61210 | Stable hand  | 21220 | Statistician, health                              |
| 41103 | Staff records clerk                                    | 21220 | Statistician, survey                              |
| 33463 | Staff training organiser                               | 81821 | Steam boiler fireman                              |
| 71151 | Stage and studio carpenter                             | 81549 | Steam press operator (textile)                    |
| 74110 | Stage and studio electrician                           | 91210 | Steam presser (laundry service)                   |
| 34412 | Stage compere  | 83425 | Steam-roller driver                               |
| 26542 | Stage director   | 72142 | Steel bender and fixer (reinforced concrete)      |
| 26549 | Stage manager  | 72143 | Steel erector, constructional                     |
| 26541 | Stage producer   | 72142 | Steel reinforcement worker                        |
| 71329 | Stage scenery painter                                  | 81215 | Steel roller (cold)                               |
| 34324 | Stage set designer                                     | 72141 | Steel worker, structural (workshop)               |
| 34399 | Stage technician                                       | 81671 | Steeper (malting)                                 |
| 75222 | Stainer (wooden furniture finishing)                   | 71199 | Steeplejack                                       |
| 75390 | Stainer, leather                                       | 75190 | Stemmer, tobacco                                  |
| 94102 | Stall assistant (coffee shop)                          | 73229 | Stencil plate maker (printing)                    |
| 94102 | Stall assistant (prepared food or drinks)              | 41311 | Stenographer                                      |
| 52110 | Stall holder (excluding prepared food or drinks)       | 41201 | Stenographic secretary                            |
|       |  | 41311 | Stenographic-typist (general)                     |
|       |  | 73212 | Stereotype caster                                 |
|       |  | 73212 | Stereotype moulder                                |
|       |  | 73212 | Stereotyper                                       |

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|-------|--|-------|---|
| 93331 | Stevedore  | 96130 | Street cleaner and sweeper<br>(except driver, mechanical<br>sweeper)                        |
| 34224 | Steward (race track)                                     | 96130 | Street sweeper and cleaner<br>(except driver, mechanical<br>sweeper)                        |
| 51112 | Steward, aircraft  | 52110 | Street vendor (excluding<br>prepared food or drinks)  |
| 51502 | Steward, chief (hotel)                                   | 52120 | Street vendor (prepared food or<br>drinks)  |
| 51111 | Steward, chief (ship)                                    | 83425 | Strike-off machine operator<br>(concrete paving)  |
| 51312 | Steward, dining salon (ship)                             | 73120 | Stringed instrument maker   |
| 51112 | Steward, flight  | 73120 | Stringer, piano   |
| 51502 | Steward, hotel   | 81599 | Stripper, bobbin  |
| 51502 | Steward, house   | 75119 | Stripper, gut   |
| 51312 | Steward, mess  | 75190 | Stripper, tobacco   |
| 91121 | Steward, room (hotel)                                    | 72111 | Stripping-plate machine moulder   |
| 51112 | Steward, ship's  | 21423 | Structural engineer (buildings)   |
| 51312 | Steward, wine  | 21422 | Structural engineer (general)   |
| 81314 | Still operator (chemical<br>processes, except petroleum) | 31001 | Structural engineer, assistant  |
| 81871 | Still pump operator (petroleum<br>refining)              | 31184 | Structural engineering<br>draughtsman   |
| 81871 | Stillman (petroleum refining)                            | 31184 | Structural engineering<br>draughtsperson  |
| 81314 | Stillman, alcohol  | 31122 | Structural engineering technician<br>(general)  |
| 33111 | Stock and shares broker                                  | 71250 | Structural glazier  |
| 43211 | Stock control clerk                                      | 72149 | Structural metal marker   |
| 33119 | Stock jobber   | 71321 | Structural steel and ship painter   |
| 43211 | Stock records clerk                                      | 72143 | Structural steel erector  |
| 33111 | Stockbroker  | 72141 | Structural steel worker<br>(workshop)   |
| 81822 | Stocker, ship's  | 24139 | Structurer, financial product   |
| 81522 | Stocking knitting machine<br>operator                    | 71230 | Stucco mason  |
| 61210 | Stockman (livestock worker)                              | 71230 | Stucco plasterer  |
| 71131 | Stone carver   | 26359 | Student vocational counsellor   |
| 71131 | Stone cutter and finisher                                | 71151 | Studio and stage carpenter  |
| 71131 | Stone driller  | 74110 | Studio and stage electrician  |
| 71131 | Stone grader   | 35214 | Studio equipment operator, radio<br>and television broadcasting<br>(except sound recording) |
| 71131 | Stone grinder  | 93100 | Stump grubber   |
| 71131 | Stone polisher   | 34399 | Stylist, fashion  |
| 83429 | Stone spreader operator<br>(construction)                | 34399 | Stylist, product  |
| 71132 | Stonemason (construction)                                | 26422 | Sub-editor, newspaper   |
| 52302 | Store cashier  | 26422 | Sub-editor, periodical  |
| 54191 | Store detective  | 81660 | Sugar beet press operator   |
| 43212 | Storekeeper  | 81626 | Sugar confectionery mixer   |
| 43212 | Storeroom clerk  | 81626 | Sugar confectionery roller  |
| 43219 | Stores assistant   |       |   |
| 43212 | Stores clerk   |       |   |
| 13241 | Stores department manager<br>(manufacturing company)     |       |   |
| 40000 | Stores supervisor  |       |   |
| 12130 | Strategic planning manager                               |       |   |
| 75299 | Straw hat maker  |       |   |
| 75299 | Straw weaver   |       |   |
| 81432 | Strawmaker, paper  |       |   |

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|-------|--|-------|---|
| 81660 | Sugar crystalliser operator                                      | 74000 | Supervisor and general foreman (electrical and electronic installation and repair)                |
| 81660 | Sugar grinder  | 82000 | Supervisor and general foreman (electrical equipment manufacturing and repairing)                 |
| 81660 | Sugar processing and refining machine operator                   | 81000 | Supervisor and general foreman (electricity generation and distribution)                          |
| 81660 | Sugar processing equipment operator (continuous refining)        | 82000 | Supervisor and general foreman (electronic equipment manufacturing and repairing)                 |
| 81660 | Sugar sieve operator   | 81000 | Supervisor and general foreman (food manufacturing)   |
| 81660 | Sulphitation man (sugar refining)                                | 75000 | Supervisor and general foreman (furniture and related products manufacturing)                     |
| 81314 | Sulphuric acid plant operator                                    | 81000 | Supervisor and general foreman (gas production and distribution)                                  |
| 51603 | Summons server   | 73000 | Supervisor and general foreman (glass products manufacturing)                                     |
| 81712 | Supercalender operator   | 73000 | Supervisor and general foreman (jewellery manufacturing)  |
| 13244 | Superintendent (postal service)                                  | 75000 | Supervisor and general foreman (leather goods making)   |
| 31599 | Superintendent, barge  | 74000 | Supervisor and general foreman (M&E)  |
| 31599 | Superintendent, ferry  | 72000 | Supervisor and general foreman (metal and machinery trades)                                       |
| 31524 | Superintendent, marine (deck)                                    | 81000 | Supervisor and general foreman (metal processing)   |
| 31513 | Superintendent, marine (engineer)                                | 81000 | Supervisor and general foreman (metal smelting, converting and refining)                          |
| 31513 | Superintendent, marine (technical)                               | 72000 | Supervisor and general foreman (non-electrical/non-electronic machinery manufacturing and repair) |
| 31599 | Superintendent, railway (MRT)                                    | 81000 | Supervisor and general foreman (paper products manufacturing)                                     |
| 31599 | Superintendent, railway depot                                    | 81000 | Supervisor and general foreman (papermaking)  |
| 31599 | Superintendent, road transport depot                             | 81000 | Supervisor and general foreman (petroleum refining)   |
| 13459 | Superintendent, school cluster                                   | 81000 | Supervisor and general foreman (plastic products manufacturing)                                   |
| 31574 | Superintendent, ship's cargo                                     | 71000 | Supervisor and general foreman (plumbing installation and repair)                                 |
| 31599 | Superintendent, terminal (water transport)                       | 73000 | Supervisor and general foreman (pottery and bricks manufacturing)                                 |
| 31599 | Superintendent, wharf  |       |   |
| 14201 | Supermarket manager  |       |   |
| 61900 | Supervisor (mixed farming)                                       |       |   |
| 71000 | Supervisor and general foreman (architectural)                   |       |   |
| 82000 | Supervisor and general foreman (assembly and quality check)      |       |   |
| 81000 | Supervisor and general foreman (beverage making)                 |       |   |
| 71000 | Supervisor and general foreman (building trades)                 |       |   |
| 71000 | Supervisor and general foreman (building)                        |       |   |
| 73000 | Supervisor and general foreman (ceramics manufacturing)          |       |   |
| 81000 | Supervisor and general foreman (chemical processing)             |       |   |
| 81000 | Supervisor and general foreman (chemical products manufacturing) |       |   |
| 81000 | Supervisor and general foreman (clothing manufacturing)          |       |   |
| 71000 | Supervisor and general foreman (construction)                    |       |   |

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|-------|---|-------|--|
| 73000 | Supervisor and general foreman (precision instrument manufacturing)                 | 51501 | Supervisor, housekeeping (except private service)                  |
| 81000 | Supervisor and general foreman (prefabrication components manufacturing)            | 40000 | Supervisor, invoice section  |
| 81000 | Supervisor and general foreman (printing)   | 51601 | Supervisor, mail   |
| 81000 | Supervisor and general foreman (rubber products manufacturing)                      | 51601 | Supervisor, mail depot   |
| 72000 | Supervisor and general foreman (ship building and repairing)                        | 40000 | Supervisor, market research  |
| 75000 | Supervisor and general foreman (shoemaking)   | 31599 | Supervisor, MRT (station master)                                   |
| 81000 | Supervisor and general foreman (synthetic material products manufacturing)          | 31572 | Supervisor, MRT service  |
| 81000 | Supervisor and general foreman (textile fibre processing and textile manufacturing) | 61112 | Supervisor, mushroom farm  |
| 75000 | Supervisor and general foreman (tobacco products manufacturing)                     | 40000 | Supervisor, office (general)                                       |
| 81000 | Supervisor and general foreman (water supply)                                       | 61900 | Supervisor, orchard  |
| 81000 | Supervisor and general foreman (well drilling)                                      | 31574 | Supervisor, port and shipping operations                           |
| 81000 | Supervisor and general foreman (wood processing)                                    | 31574 | Supervisor, port operations  |
| 81000 | Supervisor and general foreman (wood products making)                               | 51601 | Supervisor, postal service   |
| 40000 | Supervisor, accounts section  | 31579 | Supervisor, railway service  |
| 31571 | Supervisor, air transport service   | 40000 | Supervisor, records section (office)                               |
| 51509 | Supervisor, camp  | 31573 | Supervisor, road transport service                                 |
| 31579 | Supervisor, car park  | 52201 | Supervisor, sales  |
| 91000 | Supervisor, cleaning  | 31574 | Supervisor, shipping operations                                    |
| 40000 | Supervisor, clerical (general)  | 52201 | Supervisor, showroom (retail trade)                                |
| 40000 | Supervisor, cost section  | 52201 | Supervisor, showroom (wholesale trade)                             |
| 51601 | Supervisor, courier service   | 40000 | Supervisor, stores   |
| 51503 | Supervisor, dormitory   | 35231 | Supervisor, telecommunications service                             |
| 35110 | Supervisor, electronic data processing  | 31571 | Supervisor, traffic (airline)                                      |
| 61210 | Supervisor, farm (livestock)  | 31574 | Supervisor, traffic (ship's cargo)                                 |
| 61112 | Supervisor, farm (mushrooms)  | 40000 | Supervisor, wages section  |
| 61210 | Supervisor, farm (pigs)   | 74000 | Supervisors and general foreman (electrical and electronic trades) |
| 61229 | Supervisor, farm (poultry)  | 13242 | Supplies manager   |
| 40000 | Supervisor, field (market research)   | 24212 | Supply chain consultant  |
| 40000 | Supervisor, field (statistical)   | 43212 | Supply clerk   |
| 52201 | Supervisor, floor (retail trade)  | 33232 | Supply requirements buyer  |
| 54199 | Supervisor, forest  | 26120 | Supreme court judge  |
| 40000 | Supervisor, general office  | 22132 | Surgeon, cardiothoracic  |
|       |   | 22148 | Surgeon, ear, nose throat (ENT)                                    |
|       |   | 22131 | Surgeon, general   |
|       |   | 22133 | Surgeon, hand  |
|       |   | 22612 | Surgeon, oral  |
|       |   | 22135 | Surgeon, orthopaedic   |
|       |   | 22136 | Surgeon, paediatric  |
|       |   | 22137 | Surgeon, plastic   |
|       |   | 22139 | Surgeon, specialised   |
|       |   | 22132 | Surgeon, thoracic  |
|       |   | 22500 | Surgeon, veterinary  |
|       |   | 32142 | Surgical appliance maker   |

75362 Surgical boot and shoe maker  
 73119 Surgical instrument maker and  
 repairer  
 22146 Surgical pathologist  
 41109 Surveillance administrative  
 assistant  
 43142 Survey interviewer (statistical)  
 21220 Survey statistician  
 21651 Surveyor (general)  
 31158 Surveyor, airworthiness  
 21652 Surveyor, cadastral  
 21142 Surveyor, geodesist  
 21652 Surveyor, geodetic  
 21653 Surveyor, hydrographic  
 21652 Surveyor, land  
 21653 Surveyor, marine  
 31157 Surveyor, marine (ship and  
 nautical)  
 21659 Surveyor, photographic  
 21494 Surveyor, quantity  
 21652 Surveyor, topographical  
 31124 Surveyor's technician  
 71241 Suspended ceiling installer  
 91132 Sweeper, factory  
 96130 Sweeper, park  
 96130 Sweeper, street (except driver,  
 mechanical sweeper)  
 81313 Sweetland filter operator  
 81626 Sweets making machine operator  
 96259 Swimming pool attendant  
 83431 Swing-bridge operator  
 83121 Switch tender (railway yard)  
 81860 Switchboard operator, electricity  
 generating  
 42230 Switchboard operator, telephone  
 (private exchange)  
 42230 Switchboard operator, telephone  
 (telephone exchange)  
 74129 Switchgear fitter (electrical)  
 81315 Synthetic fibre maker  
 81676 Syrup making machine operator  
 25111 Systems analyst  
 25111 Systems designer (computer)  
 21522 Systems engineer (computer)  
 25140 Systems programmer

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91129 Table clearer (catering service)  
 81331 Tablet coater  
 81331 Tableting machine operator  
 83502 Taikong  
 75310 Tailor (made-to-measure  
 garment)  
 75310 Tailor (ready-to-wear garment)  
 75390 Tailor fur  
 75321 Tailor's cutter  
 43219 Tally clerk  
 34429 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)  
 61900 Tapper, rubber  
 61900 Tapper, toddy  
 61900 Tapper, tree (rubber)  
 83425 Tar spreading machine operator  
 75151 Taster, coffee and tea  
 34392 Tattooist  
 43119 Tax clerk  
 33591 Tax officer  
 33591 Taxation inspector  
 83221 Taxi driver  
 34332 Taxidermist  
 21313 Taxonomist, animal  
 21312 Taxonomist, plant  
 81677 Tea blender  
 81677 Tea blending machine operator  
 75151 Tea taster  
 23521 Teacher of the blind  
 23522 Teacher of the deaf  
 23523 Teacher of the mentally  
 handicapped  
 23529 Teacher of the mute  
 23529 Teacher of the physically  
 handicapped  
 36202 Teacher, art (private tuition)  
 36202 Teacher, calligraphy  
 36100 Teacher, child care

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|-------|--|-------|---|
| 23109 | Teacher, commercial school                           | 26414 | Technical writer                                  |
| 36203 | Teacher, computer (computer training school)         | 31152 | Technician, aeronautical engineering              |
| 36205 | Teacher, dancing (private tuition)                   | 31152 | Technician, aeronautics engineering               |
| 36206 | Teacher, drama (private tuition)                     | 31152 | Technician, aerospace component repair            |
| 36202 | Teacher, dress making (other than vocational school) | 31199 | Technician, agricultural engineering              |
| 36202 | Teacher, flower arrangement                          | 31429 | Technician, agronomy                              |
| 34221 | Teacher, golf  | 31154 | Technician, air-conditioning engineering          |
| 23300 | Teacher, junior college                              | 31429 | Technician, artificial insemination               |
| 36100 | Teacher, kindergarten                                | 31143 | Technician, audio and video equipment             |
| 36201 | Teacher, language (language school)                  | 32119 | Technician, audiometric                           |
| 36201 | Teacher, language school                             | 31174 | Technician, automation                            |
| 36204 | Teacher, music (private tuition)                     | 31153 | Technician, automotive engineering                |
| 36100 | Teacher, nursery school                              | 31411 | Technician, bacteriology                          |
| 36100 | Teacher, play school                                 | 31411 | Technician, biochemistry                          |
| 23102 | Teacher, polytechnic                                 | 31411 | Technician, biological                            |
| 36100 | Teacher, pre-primary school                          | 31411 | Technician, biotech laboratory                    |
| 23300 | Teacher, pre-university                              | 32120 | Technician, blood bank                            |
| 23400 | Teacher, primary school                              | 35211 | Technician, broadcasting operations               |
| 36991 | Teacher, relief                                      | 1123  | Technician, building                              |
| 23300 | Teacher, secondary school                            | 31161 | Technician, chemical engineering (general)        |
| 23200 | Teacher, secretarial school                          | 31163 | Technician, chemical engineering (petrochemicals) |
| 36204 | Teacher, singing (private tuition)                   | 31162 | Technician, chemical engineering (petroleum)      |
| 36206 | Teacher, speech (private tuition)                    | 31111 | Technician, chemistry                             |
| 23300 | Teacher, technical education (secondary school)      | 31121 | Technician, civil engineering (general)           |
| 23200 | Teacher, technical school                            | 31199 | Technician, coal mining                           |
| 23101 | Teacher, university                                  | 35120 | Technician, computer                              |
| 23200 | Teacher, vocational school                           | 35120 | Technician, computer systems                      |
| 36209 | Teacher, youth leadership                            | 31423 | Technician, dairy                                 |
| 53120 | Teachers' aide                                       | 32143 | Technician, dental                                |
| 23512 | Teaching aid specialist                              | 31131 | Technician, electrical engineering (general)      |
| 23511 | Teaching methods adviser                             | 31132 | Technician, electrical engineering (high voltage) |
| 26414 | Technical copywriter                                 | 32119 | Technician, electrocardiograph                    |
| 23300 | Technical education teacher (secondary school)       | 32119 | Technician, electroencephalograph                 |
| 33222 | Technical equipment sales representative             | 31195 | Technician, electronic pre-press                  |
| 33222 | Technical equipment salesman                         | 31141 | Technician, electronics engineering (general)     |
| 31189 | Technical illustrator                                |       |   |
| 26229 | Technical information archivist                      |       |   |
| 13291 | Technical manager                                    |       |   |
| 25140 | Technical programmer                                 |       |   |
| 33232 | Technical purchaser                                  |       |   |
| 33222 | Technical sales co-ordinator                         |       |   |
| 33222 | Technical sales engineer                             |       |   |
| 33222 | Technical sales representative                       |       |   |
| 33222 | Technical salesman                                   |       |   |
| 23200 | Technical school teacher                             |       |   |

|       |  |       |  |
|-------|--|-------|--|
| 31199 | Technician, extractive metallurgy                          | 32141 | Technician, orthopaedic                              |
| 31421 | Technician, farm (horticulture)                            | 32141 | Technician, orthotic                                 |
| 31412 | Technician, food   | 32120 | Technician, pathology                                |
| 31412 | Technician, food processing                                | 31163 | Technician, petrochemicals<br>(chemical engineering) |
| 31412 | Technician, food production                                | 31194 | Technician, petroleum and<br>natural gas extraction  |
| 31412 | Technician, food science                                   | 31162 | Technician, petroleum refining                       |
| 31199 | Technician, forensic science                               | 32130 | Technician, pharmaceutical                           |
| 31429 | Technician, forestry                                       | 31419 | Technician, pharmacology                             |
| 31193 | Technician, foundry  | 31193 | Technician, physical metallurgy                      |
| 34332 | Technician, gallery  | 31112 | Technician, physics                                  |
| 31194 | Technician, gas engineering (well<br>drilling)             | 31422 | Technician, plant tissue culture                     |
| 31194 | Technician, gas production and<br>distribution             | 31132 | Technician, power distribution<br>(electricity)      |
| 31119 | Technician, geology  | 31132 | Technician, power generation<br>and transmission     |
| 32120 | Technician, haematology                                    | 31196 | Technician, precision optics                         |
| 31419 | Technician, herbarium                                      | 31144 | Technician, process<br>instrumentation               |
| 31421 | Technician, horticultural                                  | 31172 | Technician, production<br>engineering                |
| 31144 | Technician, instrumentation                                | 32141 | Technician, prosthetic                               |
| 31411 | Technician, laboratory (biology)                           | 31175 | Technician, quality assurance                        |
| 31111 | Technician, laboratory<br>(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                                       | 32114 | Technician, radiography<br>(medical)                 |
| 31159 | Technician, lubrication<br>engineering                     | 31192 | Technician, refining and smelting                    |
| 31171 | Technician, manufacturing<br>engineering (general)         | 31154 | Technician, refrigeration<br>engineering             |
| 31159 | Technician, marine engineering                             | 31179 | Technician, robotics                                 |
| 33149 | Technician, mathematical                                   | 31142 | Technician, semi-conductor                           |
| 31151 | Technician, mechanical<br>engineering (general)            | 32120 | Technician, serology                                 |
| 31159 | Technician, mechanical<br>engineering (motors and engines) | 31139 | Technician, signal systems<br>(electrical)           |
| 31191 | Technician, mechatronics                                   | 31149 | Technician, signal systems<br>(electronic)           |
| 32120 | Technician, medical laboratory                             | 31429 | Technician, silvicultural                            |
| 32114 | Technician, medical x-ray                                  | 34399 | Technician, stage                                    |
| 31199 | Technician, metal mining                                   | 33149 | Technician, statistical                              |
| 31199 | Technician, metallurgical<br>(extractive)                  | 31122 | Technician, structural<br>engineering (general)      |
| 31193 | Technician, metallurgical<br>(physical)                    | 31124 | Technician, surveyor's                               |
| 31119 | Technician, meteorological                                 | 35220 | Technician, telecommunications                       |
| 31199 | Technician, mining   | 31143 | Technician, television<br>engineering                |
| 31199 | Technician, mining engineering                             | 31179 | Technician, time study                               |
| 31179 | Technician, motion study                                   |       |  |
| 34332 | Technician, museum   |       |  |
| 31194 | Technician, oil and gas well<br>drilling                   |       |  |

|       |   |       |  |
|-------|---|-------|--|
| 31411 | Technician, tissue culture (non-plant)            | 42230 | Telephone switchboard operator (telephone exchange)  |
| 31422 | Technician, tissue culture (plant)                | 42230 | Telephonist  |
| 31154 | Technician, ventilation engineering               | 41319 | Teleprinter operator                                 |
| 32400 | Technician, veterinary                            | 83490 | Telescopic handler operator                          |
| 31143 | Technician, video equipment                       | 41319 | Teletypist   |
| 31179 | Technician, work study                            | 74212 | Television and radio receiving set mechanic          |
| 31419 | Technician, zoology                               | 35214 | Television and radio studio equipment operator       |
| 21496 | Technologist, brewery                             | 35214 | Television and radio transmitting equipment operator |
| 21495 | Technologist, ceramics                            | 34412 | Television announcer                                 |
| 21496 | Technologist, food and drink                      | 35213 | Television camera operator                           |
| 21495 | Technologist, glass                               | 34412 | Television compere                                   |
| 35214 | Telecine operator (television broadcasting)       | 26542 | Television director                                  |
| 74224 | Telecommunications and telephone installer        | 26545 | Television editor                                    |
| 74223 | Telecommunications and telephone lineman          | 21524 | Television engineer                                  |
| 74224 | Telecommunications and telephone mechanic         | 31143 | Television engineering technician                    |
| 21530 | Telecommunications engineer                       | 34412 | Television news reader                               |
| 21530 | Telecommunications network professional           | 34412 | Television presenter                                 |
| 13303 | Telecommunications operations manager             | 26541 | Television producer                                  |
| 35231 | Telecommunications service supervisor             | 82122 | Television receiver assembler                        |
| 35220 | Telecommunications technician                     | 74221 | Television transmitter fitter                        |
| 74224 | Telegraph installer                               | 74221 | Television transmitter mechanic                      |
| 35239 | Telegrapher                                       | 26545 | Television, radio and video editor                   |
| 74224 | Telegraphic mechanic                              | 42111 | Teller, bank   |
| 41319 | Telegraphic typewriter operator                   | 42111 | Teller, vault  |
| 52440 | Telemarketer                                      | 81220 | Temperer, metal                                      |
| 74224 | Telephone and telecommunications installer        | 81811 | Tempering furnaceman, glass                          |
| 74223 | Telephone and telecommunications lineman          | 72229 | Template maker                                       |
| 74224 | Telephone and telecommunications mechanic         | 81312 | Tender, char-kiln (chemical and related processes)   |
| 74223 | Telephone and telegraph cable jointer             | 81312 | Tender, oven (paint drying)                          |
| 74223 | Telephone and telegraph cableman                  | 81215 | Tender, rolling mill stands                          |
| 21530 | Telephone engineer                                | 83121 | Tender, switch (railway yard)                        |
| 42230 | Telephone operator (private exchange)             | 34210 | Tennis player  |
| 42230 | Telephone operator (telephone exchange)           | 26524 | Tenor  |
| 42230 | Telephone switchboard operator (private exchange) | 93100 | Tent erector   |
|       |   | 75390 | Tent maker   |
|       |   | 75390 | Tent sewer   |
|       |   | 31599 | Terminal superintendent (water transport)            |
|       |   | 81143 | Terrazzo tile making machine operator                |
|       |   | 31532 | Test pilot (aircraft)                                |
|       |   | 82131 | Tester (electrical equipment)                        |
|       |   | 82131 | Tester (electronic equipment)                        |
|       |   | 81872 | Tester, cylinder (compressed and liquefied gases)    |
|       |   | 51950 | Tester, driving                                      |

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|-------|--|-------|---------------------------------------|
| 82131 | Tester, electrical products                | 31512 | Third engineer (ship)                 |
| 82131 | Tester, electronic products                | 22132 | Thoracic surgeon                      |
| 82132 | Tester, mechanical products                | 75390 | Thread cutter                         |
| 35219 | Tester, recording                          | 81512 | Thread doubler                        |
| 25151 | Testing specialist, information technology | 81511 | Thread spinner                        |
| 81541 | Textile bleacher                           | 81512 | Thread twister                        |
| 81549 | Textile calender operator                  | 81512 | Thread winder                         |
| 72249 | Textile card grinder                       | 83490 | Threshing machine operator            |
| 34352 | Textile designer                           | 73141 | Thrower, pottery and porcelain        |
| 81549 | Textile drier                              | 52302 | Ticket clerk (booking office)         |
| 75390 | Textile fibre clarifier                    | 96259 | Ticket collector                      |
| 81542 | Textile fibre dyer                         | 51122 | Ticket inspector                      |
| 72339 | Textile machinery fitter                   | 52302 | Ticket seller (booking office)        |
| 72339 | Textile machinery fitter-assembler         | 42210 | Ticketing clerk (travel agency)       |
| 72333 | Textile machinery mechanic                 | 42210 | Ticketing officer (travel agency)     |
| 81549 | Textile press operator                     | 34429 | Tight-rope walker                     |
| 73221 | Textile printer                            | 81811 | Tile and brick kilnman                |
| 81543 | Textile shrinker                           | 73142 | Tile and brick moulder                |
| 81543 | Textile washer                             | 71210 | Tile and slate roofer                 |
| 81543 | Textile washer and shrinker                | 71220 | Tile layer (composition tiles)        |
| 81543 | Textile washing machine operator           | 71220 | Tile setter                           |
| 81541 | Textile-bleaching machine operator         | 71220 | Tiler, floor                          |
| 21130 | Textiles chemist                           | 71220 | Tiler, wall                           |
| 81543 | Textile-shrinking machine operator         | 61900 | Timber cutter (forestry)              |
| 71210 | Thatcher                                   | 71220 | Timber flooring worker                |
| 71151 | Theatre carpenter                          | 93100 | Timberman (construction)              |
| 74110 | Theatre electrician                        | 51129 | Time keeper (transport)               |
| 14330 | Theatre manager                            | 31179 | Time study technician                 |
| 33399 | Theatrical agent                           | 42149 | Timekeeper (except transport)         |
| 26542 | Theatrical director                        | 81242 | Tin dipper                            |
| 26541 | Theatrical producer                        | 72139 | Tinsmith                              |
| 51133 | Theme park guide                           | 31411 | Tissue culture technician (non-plant) |
| 14322 | Theme park manager                         | 31422 | Tissue culture technician (plant)     |
| 29019 | Theologian                                 | 21326 | Tissue culturist, plant               |
| 32521 | Therapeutic dietitian                      | 75190 | Tobacco blender                       |
| 32560 | Therapist for orientation of the blind     | 75190 | Tobacco cake maker                    |
| 32512 | Therapist, dental health                   | 75190 | Tobacco flavourer                     |
| 32532 | Therapist, language                        | 75190 | Tobacco grader                        |
| 32112 | Therapist, medical radiation               | 75190 | Tobacco mixer                         |
| 32560 | Therapist, occupational                    | 75190 | Tobacco paste maker                   |
| 32512 | Therapist, oral health                     | 75190 | Tobacco plug maker                    |
| 32551 | Therapist, physical                        | 75190 | Tobacco preparer                      |
| 32112 | Therapist, radiation                       | 75190 | Tobacco stemmer                       |
| 32560 | Therapist, recreational                    | 75190 | Tobacco stripper                      |
| 32532 | Therapist, speech                          | 81432 | Toilet paper roller machine operator  |
| 21110 | Thermodynamicist                           | 81339 | Toiletry products machine operator    |
|       |  | 42149 | Toll collector                        |

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|-------|--|-------|--|
| 73120 | Tone regulator (musical instrument)                  | 74110 | Train electrician                              |
| 72221 | Tool and die maker                                   | 83121 | Train shunter                                  |
| 31156 | Tool designer  | 51945 | Trainer (obedience school)                     |
| 72249 | Tool grinder (except machine-tool)                   | 51942 | Trainer (zoo)                                  |
| 72242 | Tool grinder (machine-tool)                          | 51943 | Trainer in crocodile farm                      |
| 31155 | Tooling technician                                   | 51942 | Trainer, animal (zoo)                          |
| 21442 | Tools and industrial machinery engineer              | 51942 | Trainer, bird                                  |
| 72211 | Toolsmith  | 51945 | Trainer, dog                                   |
| 31189 | Topographical draughtsman                            | 51942 | Trainer, elephant                              |
| 31189 | Topographical draughtsperson                         | 51945 | Trainer, greyhound                             |
| 21652 | Topographical surveyor                               | 51944 | Trainer, horse                                 |
| 51131 | Tour leader  | 34229 | Trainer, physical                              |
| 51131 | Tourist guide  | 51944 | Trainer, race horse                            |
| 83431 | Tower crane operator                                 | 34429 | Trainer, wild animal (circus)                  |
| 21641 | Town planner   | 51942 | Trainer, wild animal (zoo)                     |
| 21341 | Toxicologist   | 33463 | Training executive                             |
| 21130 | Toxicologist, food                                   | 12123 | Training manager                               |
| 82191 | Toy assembler  | 33463 | Training officer                               |
| 82191 | Toymaker (general)                                   | 83312 | Tram driver                                    |
| 82191 | Toymaker (metal)                                     | 73229 | Transferrer, direct lithographic               |
| 82191 | Toymaker (stuff toys)                                | 73229 | Transferrer, lithographic                      |
| 82191 | Toymaker (wood)                                      | 73229 | Transferrer, photo-mechanical                  |
| 21519 | Traction engineer (electric power)                   | 74129 | Transformer, fitter                            |
| 83431 | Tractor crane operator                               | 39101 | Translator                                     |
| 72311 | Tractor mechanic                                     | 21512 | Transmission engineer (electric power)         |
| 33241 | Trade broker   | 72311 | Transmission mechanic (motor vehicle)          |
| 33493 | Trade finance executive                              | 13243 | Transport operations manager                   |
| 33241 | Trader, bunker                                       | 31573 | Transport service inspector (buses and trams)  |
| 33114 | Trader, commodities (financial)                      | 31579 | Transport service inspector, railway           |
| 33113 | Trader, futures                                      | 34424 | Trapeze artiste                                |
| 33241 | Trader, oil  | 42210 | Travel agency clerk                            |
| 43149 | Traffic clerk  | 51131 | Travel and tourist guide                       |
| 43239 | Traffic clerk (freight)                              | 42210 | Travel officer                                 |
| 31540 | Traffic controller, air                              | 42210 | Travel reservations clerk                      |
| 31560 | Traffic controller, sea                              | 42210 | Travel service clerk                           |
| 13243 | Traffic department manager                           | 33229 | Traveller, commercial                          |
| 21649 | Traffic engineer                                     | 62220 | Trawler crewman                                |
| 31573 | Traffic inspector (passenger road transport service) | 81419 | Tread cutter (tyre making)                     |
| 31579 | Traffic inspector (railway)                          | 24134 | Treasury manager                               |
| 31597 | Traffic officer, MRT                                 | 33225 | 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   |       |  |



|       |                               |       |   |
|-------|-------------------------------|-------|---|
| 51931 | Undertaker                    | 72312 | Vehicle frame builder   |
| 72159 | Underwater cable splicer      | 75229 | Vehicle frame builder (wood)                                    |
| 75402 | Underwater diver              | 71250 | Vehicle glazier   |
| 33212 | Underwriter                   | 31720 | Vehicle inspector (government)                                  |
| 33212 | Underwriter, insurance        | 31720 | Vehicle inspector (private sector)                              |
| 43122 | Underwriting clerk            | 93332 | Vehicle loader, road and railway                                |
| 23101 | University teacher            | 72133 | Vehicle sheet metal worker                                      |
| 75349 | Upholsterer, aircraft         | 75342 | Vehicle upholsterer   |
| 75342 | Upholsterer, automobile       | 91220 | Vehicle washer  |
| 75341 | Upholsterer, furniture        | 96292 | Vending machine collector                                       |
| 75342 | Upholsterer, rail-carriage    | 72339 | Vending machine repairer and servicer                           |
| 75349 | Upholsterer, soft furnishings | 52110 | Vendor, street (excluding prepared food or drinks)              |
| 75342 | Upholsterer, vehicle          | 52120 | Vendor, street (prepared food or drinks)                        |
| 21610 | Urban design architect        | 75222 | Veneer applier  |
| 21641 | Urban land planner            | 81722 | Veneer cutter   |
| 21641 | Urban planner                 | 81722 | Veneer cutting lathe operator                                   |
| 22138 | Urologist                     | 75219 | Veneer dryer tender   |
| 96259 | Usher                         | 81723 | Veneer glue spreader  |
|       |                               | 75229 | Veneer grader   |
|       |                               | 81722 | Veneer machine operator, rotary                                 |
|       |                               | 81724 | Veneer press operator   |
|       |                               | 81723 | Veneer sheet gluer  |
|       |                               | 81859 | Ventilation and heating equipment operator                      |
|       |                               | 31154 | Ventilation engineering technician                              |
|       |                               | 31189 | Ventilation systems draughtsman                                 |
|       |                               | 31189 | Ventilation systems draughtsperson                              |
|       |                               | 34429 | Ventriloquist   |
|       |                               | 33493 | Venture capital & private equity administrators                 |
|       |                               | 33221 | Venture capital & private equity business development executive |
|       |                               | 41202 | Verbatim reporter   |
|       |                               | 81642 | Vermicelli making machine operator                              |
|       |                               | 22500 | Veterinarian  |
|       |                               | 22500 | Veterinarian, public health                                     |
|       |                               | 32400 | Veterinary assistant  |
|       |                               | 22500 | Veterinary epidemiologist                                       |
|       |                               | 32400 | Veterinary nurse  |
|       |                               | 22500 | Veterinary pathologist  |
|       |                               | 22500 | Veterinary surgeon  |
|       |                               | 32400 | Veterinary technician   |
|       |                               | 32400 | Veterinary vaccinator   |
|       |                               | 83425 | Vibrating-screed operator (concrete paving)                     |

## V

|       |  |
|-------|--|
| 61229 | Vaccinator (poultry)                                 |
| 32400 | Vaccinator, veterinary                               |
| 81619 | Vacuum oven operator (foodstuffs)                    |
| 81314 | Vacuum pan operator (chemical and related processes) |
| 81629 | Vacuum pan operator (condensed milk)                 |
| 81619 | Vacuum pan operator (food essences)                  |
| 96212 | Valet service boy (hotel)                            |
| 33151 | Valuer   |
| 83223 | Van driver   |
| 72311 | Van, motor, mechanic                                 |
| 75222 | Varnisher (wooden furniture finishing)               |
| 81719 | Varnishing machine operator (papermaking)            |
| 42111 | Vault teller   |
| 61119 | Vegetable farmer                                     |
| 61119 | Vegetable garden worker                              |
| 75190 | Vegetable pickler                                    |
| 75190 | Vegetable preserver                                  |
| 72312 | Vehicle body builder                                 |
| 75229 | Vehicle body builder (wood)                          |
| 72133 | Vehicle body repairer                                |
| 74110 | Vehicle electrician                                  |
| 72311 | Vehicle engine tuner                                 |

|       |  |       |   |
|-------|--|-------|---|
| 29011 | Vicar  | 93334 | Warehouse porter                                  |
| 13451 | Vice principal, school                                       | 13241 | Warehousing department manager                    |
| 35212 | Video camera operator  | 13241 | Warehousing manager                               |
| 35212 | Video camera operator, sports                                | 81522 | Warp knitting machine operator                    |
| 26545 | Video editor   | 91210 | Washer (laundry service)                          |
| 21524 | Video equipment engineer                                     | 81319 | Washer operator (chemical and related processes)  |
| 74212 | Video equipment mechanic                                     | 91220 | Washer, car                                       |
| 31143 | Video equipment technician                                   | 75119 | Washer, carcass                                   |
| 35214 | Video operator (television broadcasting)                     | 81543 | Washer, cloth (textile making)                    |
| 35214 | Video recording equipment operator (television broadcasting) | 94104 | Washer, dish                                      |
| 74212 | Video reproducing and recording equipment mechanic           | 81543 | Washer, textile                                   |
| 81679 | Vinegar maker  | 91220 | Washer, vehicle                                   |
| 61900 | Vineyard worker  | 81543 | Washer, yarn                                      |
| 36204 | Violin instructor (extracurriculum)                          | 91302 | Washerwoman (household)                           |
| 73120 | Violin maker and repairer                                    | 81830 | Washing machine operator, bottle                  |
| 26521 | Violinist  | 81319 | Waste treatment operator (radio-active materials) |
| 21323 | Virologist, plant  | 73111 | Watch and clock assembler                         |
| 23512 | Visual teaching aid specialist                               | 73112 | Watch and clock repairer                          |
| 34391 | Visualiser   | 81419 | Watchcase vulcaniser (tyres)                      |
| 26523 | Vocal group conductor  | 96261 | Watchman  |
| 26524 | Vocalist   | 81853 | Water pumpman                                     |
| 26359 | Vocational guidance counsellor                               | 81854 | Water treatment plant operator (water works)      |
| 23200 | Vocational school teacher                                    | 13291 | Water works manager                               |
| 73120 | Voicer (organ)   | 83509 | Waterman  |
| 21142 | Volcanologist  | 71249 | Waterproofing worker                              |
| 81419 | Vulcaniser (rubber goods, except tyres)                      | 83329 | Water-tank driver                                 |
| 81419 | Vulcaniser, tyre   | 73161 | Waxer (glass sandblasting)                        |
| 81419 | Vulcaniser, watchcase (tyres)                                | 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                                |
|       |  | 75401 | Weed controller                                   |
|       |  | 81626 | Weigher (sugar confectionery)                     |
|       |  | 33599 | Weights and measures inspector (government)       |
|       |  | 72121 | Welder  |

## 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                |

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|-------|---|-------|---|
| 26359 | Welfare officer for the deaf                      | 81231 | Wire drawer                                   |
| 26359 | Welfare officer for the physically handicapped    | 72229 | Wire goods maker                              |
| 34129 | Welfare support worker                            | 71149 | Wire mesh worker, reinforcing (concrete)      |
| 26351 | Welfare worker                                    | 81243 | Wire plater (machine)                         |
| 26353 | Welfare worker, mental                            | 35215 | Wire recording equipment operator             |
| 26351 | Welfare worker, prison                            | 74131 | Wireman, electric power (overhead)            |
| 26351 | Welfare worker, social                            | 74139 | Wireman, electric power (underground)         |
| 81132 | Well borer (except oil and gas)                   | 74131 | Wireman, electric traction (overhead)         |
| 71144 | Well cementer (oil and gas)                       | 74223 | Wireman, telephone and telegraph              |
| 81132 | Well driller (water well)                         | 51411 | Women's hairdresser                           |
| 81132 | Well driller and borer (except oil and gas wells) | 34129 | Women's shelter worker                        |
| 72156 | Well drilling rigger, oil and gas                 | 75229 | Wood bender                                   |
| 81139 | Well puller (oil and gas wells)                   | 71220 | Wood block floor layer                        |
| 81712 | Wet-end machine operator (papermaking)            | 71151 | Wood boatbuilder                              |
| 62220 | Whaler crewman                                    | 75229 | Wood grader                                   |
| 31599 | Wharf superintendent                              | 81711 | Wood grinder                                  |
| 31599 | Wharfinger  | 75212 | Wood impregnator                              |
| 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                |
| 34429 | 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                                    |       |   |
| 51312 | Wine steward                                      |       |   |
| 75159 | Wine taster                                       |       |   |
| 51312 | Wine waiter                                       |       |   |
| 81243 | Wire coating machine operator                     |       |   |



**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

Working Group for  
Revision of SSOC 2010

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## 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 provide key data on Singapore's economy and population.
- ◆ News  
which cover the Performance of Singapore Economy, the Consumer Price Index, the Wholesale Trade Index, Business Receipts Index for Service Industries, Retail Sales and Catering Trade Indices, Manufacturing Performance, Singapore External Trade, Tourism Sector Performance, Real Estate Information and Employment Situation.
- ◆ Publications - Papers & Analyses  
which provide papers on economic and social topics.
- ◆ Themes  
which presents official statistics compiled by DOS and the Research and Statistics Units 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 Catalogue  
which lists the latest editions of publications released by the Singapore Department of Statistics at <http://www.singstat.gov.sg/pubn/catalog.html>. All softcopy DOS publications are available for free downloading. Statistical tables of DOS publications in Excel format are also available.
- ◆ Advance Release Calendar  
which covers key Singapore economic indicators.

The website also provides a convenient gateway to international statistical websites under the "Statistical Resources" section:

- ◆ Guide to International Statistics  
which covers international databases, classifications and links, and statistical terms and definitions.
- ◆ 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 ([www.singstat.gov.sg/express](http://www.singstat.gov.sg/express)).

## SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES (continued)

### 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 are available at <http://www.singstat.gov.sg/svcs/rss.html>.

### Data on SMS

Data on SMS is a free mobile service for local data users to receive the latest data for key indicators via SMS. Simply key **data** and SMS to 74688 (or SGOVT) for the service. More information is available at <http://www.singstat.gov.sg/svcs/dataonsms.html>.

### SingStat Time Series (STS) Online System

The SingStat Time Series (STS) Online System is an internet-accessible time series retrieval system. The STS includes more than 7,000 historical data series on Singapore society and economy from several domains, including national accounts, balance of payments, investments, finance, labour, prices, business expectations, trade, manufacturing, tourism, demography, health and education.

Besides the usual monthly, quarterly and annual data, STS includes also seasonally adjusted data series for key economic indicators providing for a better analysis and understanding of current economic trends. The STS also offers:

- Web-based search engine that is easy to use;
- "Bookmark" features that enable users to save and organise links in their personalised portals.

Subscription to STS is opened to local and overseas users. More information on STS are available via Statistics Singapore Website. For enquiries, please contact our Department at **Tel : 6332-7119**.

### 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