

Generalao, Ian Nicole

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## Mapping tasks to occupations using Philippine data

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#### **Mapping tasks to occupations using Philippine data**

by

Ian Nicole Generalao

University of the Philippines School of Economics  
Diliman, Quezon City

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# Mapping tasks to occupations using Philippine data<sup>1</sup>

Ian Nicole A. Generalao

## Abstract

Treating occupations as bundles of tasks rather than discrete categories is the central idea upon which the “task approach” to labor market analysis is built. To apply the framework, this paper maps the 3,279 task characteristics of occupations using the International Standard Classification of Occupations 2008 (ISCO-08) to derive the task portfolios of 424 occupations listed under the Philippine Standard Occupational Classification (PSOC). These portfolios allow us to measure how intensive an occupation is in performing different tasks (e.g. non-routine analytical, non-routine interpersonal, non-routine manual, routine cognitive and routine manual). The main contribution of this paper is the task portfolios of the 424 occupations, which can be a starting point for further studies on the implications of automation, immigration, and international offshoring on employment and the returns to specific skills, not just in the Philippines but also for countries which base their local occupational codes to the ISCO.

**JEL Classification:** J24, J01, J20

**Keywords:** Tasks, Skills, Human Capital, Labor Market Data

Treating occupations or jobs as bundles of tasks rather than discrete categories is the central idea upon which the “task approach” to labor market analysis is built. The gist is that a job requires the performance of a set of tasks to which a worker’s skills are applied. The manner in which a task is performed can change in response to a variety of factors. A particular task may be performed by domestic labor, foreign labor (through offshoring), or capital according to the usual efficiency criteria. On this basis, the aggregate demand for skills in the labor market can be traced to the specific skills demanded to perform the tasks required in particular jobs. Thus, the task framework has been used to analyze the implications of automation (Autor et al. [2003]; Autor et al. [2006];

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<sup>1</sup> I would like to express my deepest and sincerest gratitude to Dr. Emmanuel F. Esguerra for his invaluable insights and encouragement in the completion of this paper. Any errors, however, are solely my own.

Spitz-Oener [2006]; Goos and Manning [2007]; Dustman et al. [2009]; Acemoglu and Autor [2011]; Autor and Dorn [2013]), immigration (Cortes [2008]; Peri and Sparber [2009]), and international offshoring (Grossman and Rossi-Hansberg [2006]; Blinder [2009]; Blinder and Krueger [2009]; Acemoglu and Autor [2011]; Goos et al. [2014]), on employment and the returns to specific skills (Ingram & Neumann [2006]; Autor & Handel [2013]; Stinebrickner et al. [2017]; Yamaguchi [2018]; Stinebrickner et al. [2018]). The task approach also provides a basis for analyzing the similarity between any pair of occupations in terms of the distance between them in the task complexity space (Poletaev and Robinson [2008]; Gathmann and Schönberg [2010]; Nedelkoska et al. [2015]; Bechichi et al. [2018])<sup>2</sup>. From this vantage point, transferability of skills across occupations can be understood and the corresponding returns explained. Movement between occupations involving similar tasks is easier and returns to existing skills are not too dissimilar compared with that between occupations with very different tasks which is likely to entail a cost [Yamaguchi 2012].

Applying the task framework requires information about the task content of occupations. Moreover, since every occupation involves several tasks or activities which may not be unique to it (e.g. economists and accountants both do data analysis; carpenters and plumbers both perform repairs using hand tools), the resulting tasks list would certainly be very long and somewhat repetitive. However, it is possible to reduce the tasks to a manageable number by adopting some classification scheme.

## **Related literature**

A review of the task-approach literature yielded five task classification schemes that have been used by a number of authors working with different databases. Tasks are classified as being: (1) cognitive or manual (Yamaguchi [2012]; Yamaguchi [2018]); (2) cognitive, manual or interpersonal [Gathmann and Schönberg 2010]; (3) abstract, routine or manual [Autor and Handel 2013]; (4) intensive in intelligence, clerical, fine motor or physical (strength) skills [Ingram and Neumann 2006] and (5) non-routine analytical, non-routine interpersonal, non-routine manual,

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<sup>2</sup> This is the subject matter of my recently completed MA thesis [Generalao 2019]. This paper describes in detail the procedure of mapping tasks to occupations which is the starting point in applying the task-based framework and constitutes the basis in developing an occupational distance measure in the task-complexity space.

routine cognitive, routine manual (Autor et al. [2003]; Spitz-Oener [2006]; Antonczyk et al. [2009]).

According to the first classification scheme due to Yamaguchi [2012, 2018], indicators for cognitive tasks include dealing with data and people; requiring reasoning, mathematical and language skills, intelligence, verbal and numerical skills; and influencing and interacting with people. On the other hand, manual task indicators include motor and eye-hand-foot coordination, finger and manual dexterity, spatial perception, color discrimination, setting limits, and requiring physical exertion.

The other classifications expand the first one by accounting for other task characteristics. The second classification scheme due to Gathmann and Schönberg [2010] uses Germany's Qualification Career Service (QCS) and adopts 19 keywords as guide to classifying each task according to three task characteristics: cognitive, manual, or interpersonal. Autor and Handel [2013] pattern their classification after Autor et al. [2003] who used the United States' O\*NET database (formerly the Dictionary of Occupational Titles or DOT). Ingram and Neumann [2006] applied factor analysis to the DOT resulting in four factors used as task categories.

Autor et al. [2003] used the occupational characteristics from DOT while Spitz-Oener [2006] and Antonczyk et al. [2009] adopted the QCS in classifying the task characteristics of an occupation into five categories. These are non-routine analytical, non-routine interpersonal, routine cognitive, routine manual, and non-routine manual. Non-routine analytical tasks require analysis and interpretation of data and information and creative thinking, while non-routine interpersonal tasks generally involve personal interaction such as educating and consulting. Non-routine manual tasks are associated with finger and hand dexterity, spatial orientation, and operating vehicles or mechanized devices. Routine cognitive tasks involve repetitive tasks and require accuracy in execution, while routine manual tasks depend on the speed of equipment and controlling machines and processes.

There being no record of any previous attempt to apply the task approach on Philippine data, this paper is probably the first such attempt. Task portfolios for occupations listed under the Philippine Standard Occupational Classification (PSOC) are constructed using a task classification process to be described below. The task characteristics of occupations are based on the International Standard Classification of Occupations – 2008 (ISCO-08). Previous work cited in the literature

have used data sets unique to the labor markets being studied, such as the O\*NET (formerly the Dictionary of Occupational Titles (DOT) for the United States (Autor et al. [2003]; Autor et al. [2006,2008]; Goos and Manning [2007]; Poletaev and Robinson [2008]; Peri and Sparber [2009]; Firpo et al. [2011]; Autor and Dorn [2013]; Goos et al. [2014]), the Qualification Career Survey (QCS) for Germany (Spitz-Oener [2006]; Antonczyk et al. [2009]; Dustman et al. [2009]; Black and Spitz-Oener [2010]; Gathmann and Schönberg [2010]; Nedelkoska et al. [2015]), and The Survey of Adult Skills by the Programme for the International Assessment of Adult Competencies (PIAAC) [Bechichi et al. 2018]. Apart from these, other datasets have been developed and used in the literature such as the World Bank's Skills Towards Employability and Productivity (STEP) Survey, the Princeton Data Improvement Initiative (PDII), and the longitudinal Berea Panel Study (BPS).

## **Task profiling of occupations**

The International Standard Classification of Occupations 2008 (ISCO-08) contains information about the tasks performed in every occupation included in the list. International Labour Organization (ILO) defines it as “a system for classifying and aggregating occupational information obtained by means of statistical censuses and surveys, as well as from administrative records”. It is a four-level hierarchically structured classification that allows jobs to be classified into 436 unit groups, 130 minor groups, 43 sub-major groups and 10 major groups. These groupings are based on the similarity in the skill levels and skill specializations required for the jobs which lead to a relatively detailed and internationally comparable set of data.

This study uses ISCO-08 because the 2012 PSOC is patterned after it with a few modifications. The Philippine Statistics Authority defines PSOC as “a statistical classification of the different occupational groups of the working population, including the military work force in the country.” Moreover, it is primarily used as a basis for manpower and educational planning, program formulation, policy decision-making and serves as useful guide for statistical operations and activities, such as censuses and surveys.

Table 1 presents an example of an occupation described in the ISCO-08. The table compares the associated task characteristics as described in the PSOC and the Bureau of Labor and Employment of the Department of Labor and Employment (DOLE-BLE). It is clear from the description of a

bookkeeper that the characteristics of a bookkeeper as defined by the BLE Career Guide and PSOC are essentially similar to those described in the ISCO-08. As an additional check, some other occupations in the BLE Career Guide were matched and verified against the task descriptions in ISCO-08.

**Table 1. Occupational Characteristics of Bookkeepers, ISCO-08 vs. PSOC vs. BLE Career Guide**

<b>ISCO-08</b>	<b>PSOC</b>	<b>BLE Career Guide</b>
maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from accountants;	maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from accountants;	receives and records invoices and arranges payment;
verifying accuracy of documents and records relating to payments, receipts and other financial transactions;	verifying accuracy of documents and records relating to payments, receipts and other financial transactions;	prepares and sends invoices to debtors;
preparing financial statements and reports for specified periods;	preparing financial statements and reports for specified periods;	prepares regular reports and summaries of accounting activities;
applying knowledge of bookkeeping principles and practices in order to identify and solve problems arising in the course of their work;	applying knowledge of bookkeeping principles and practices in order to identify and solve problems arising in the course of their work;	verifies recorded transactions and reports irregularities to management; and
using standard computer software packages to perform accounting and related calculations;	using standard computer software packages to perform accounting and related calculations;	prepares reconciliations of accounts.
supervising the work of accounts and bookkeeping clerks.	supervising the work of accounts and bookkeeping clerks.	

Sources: *ILO (first column), PSA (second column) and DOLE-BLE (third column)*

Based on the foregoing, this paper proceeds to classify 3,279 tasks performed in 424 occupations included in PSOC according to one of several task classification schemes adopted in the literature which are described a few paragraphs above.

In classifying each task, this paper follows the keywords used by the corresponding task-based literature listed in Tables 2-8. In particular, the appendix shows how each of the 3,279 tasks of the 424 occupations is classified as either non-routine analytical, non-routine interpersonal, non-routine manual, routine manual or routine cognitive using the keywords in Tables 2-8 as the guide.

**Table 2. Keywords used by Yamaguchi [2012,2018]**

<b>Task Classification</b>	<b>Key Task Characteristics</b>
<b>Cognitive</b>	data and people
	reasoning, mathematical, and language
	intelligence, verbal, and numerical
	influencing people, accepting responsibility for direction, and dealing with people
<b>Manual</b>	motor coordination
	finger dexterity
	manual dexterity
	eye-hand-foot coordination
	spatial perception
	color discrimination
	setting limits, tolerance or standards
	physical demand

**Table 3. Keywords used by Gathmann and Schönberg [2010]**

<b>Task Classification</b>	<b>Task</b>
<b>Analytical</b>	Research, evaluate, or measure
	Design, plan, or sketch
	Correct texts or data
	Calculate or do bookkeeping
	Program
	Execute laws or interpret rules
<b>Manual</b>	Equip or operate machines
	Repair, renovate, or reconstruct
	Cultivate
	Manufacture, install, or construct
	Cleaning
	Serve or accommodate
	Pack, ship, or transport
	Secure
<b>Interpersonal</b>	Nurse or treat others
	Sell, buy, or advertise
	Teach or train others



	Publish, present, or entertain others
	Employ, manage personnel, organize, coordinate

**Table 4. Keywords used by Autor and Handel [2013]**

<b>Task Classification</b>	<b>Tasks</b>
<b>Abstract</b>	Analyzing data/information
	Thinking creatively
	Interpreting information for others
	Establishing and maintaining personal relationships
	Guiding, directing, and motivating subordinates
	Coaching and developing others
<b>Routine</b>	Importance of repeating the same tasks
	Importance of being exact or accurate
	Structured versus unstructured work
	Controlling machines and processes
	Keeping a pace set by machinery or equipment
	Time spent making repetitive motions
<b>Manual</b>	Operating vehicles, mechanized devices, or equipment
	Time spent using hands to handle, control, or feel objects, tools, or controls
	Manual dexterity
	Spatial orientation

**Table 5. Keywords used by Ingram and Neumann [2006]**

<b>Task Classification</b>	<b>Tasks</b>
<b>Intelligence</b>	general intelligence
	numerical ability
	language skills
	dealing with people, to talk, and listen
	making decisions, to influence and control others
<b>Clerical</b>	clerical ability
	spatial perception
	form perception
	finger dexterity
	ability to meet specific tolerances
<b>Motor</b>	spatial perception
	ability to work alone
	eye-hand-foot coordination
<b>Strength</b>	strength requirements of the job

	exposure to hazardous and noisy conditions
	physical exertion (climbing, stooping, crawling, reaching, etc.)

**Table 6. Keywords used by Autor and Acemoglu [2011]**

Task Classification	Tasks
<b>Non-routine analytical</b>	Analyzing data/information
	Thinking creatively
	Interpreting information for others
<b>Non-routine interpersonal</b>	Establishing and maintaining personal relationships
	Guiding, directing and motivating subordinates
	Coaching/developing others
<b>Non-routine manual physical</b>	Operating vehicles, mechanized devices, or equipment
	Spend time using hands to handle, control or feel objects, tools or controls
	Manual dexterity
	Spatial orientation
<b>Routine cognitive</b>	Importance of repeating the same tasks
	Importance of being exact or accurate
	Structured vs. Unstructured work (reverse)
<b>Routine manual</b>	Pace determined by speed of equipment
	Controlling machines and processes
	Spend time making repetitive motions

**Table 7. Keywords used by Spitz-Oener [2006]**

Task Classification	Task
<b>Nonroutine analytic</b>	researching
	analyzing
	evaluating and planning
	making plans/constructions
	designing
	sketching
	working out rules/prescriptions
	using and interpreting rules
<b>Nonroutine interactive</b>	negotiating
	lobbying
	coordinating
	organizing
	teaching or training
	selling
	buying

	advising customers
	advertising
	entertaining or presenting
	employing or managing personnel
<b>Routine cognitive</b>	calculating
	bookkeeping
	correcting texts/data
	measuring length/weight/temperature
<b>Routine manual</b>	operating or controlling machines and equipping machines
<b>Nonroutine manual</b>	repairing or renovating houses/apartments/machines/vehicles
	restoring art/monuments
	serving or accommodating

**Table 8. Keywords used by Antonczyk et al. [2009]**

<b>Task Classification</b>	<b>Task</b>
<b>Non-routine analytic</b>	developing
	researching
	designing and gathering information
	investigating
	documenting
<b>Non-routine interactive</b>	informing
	advising and training
	teaching
	tutoring
	educating and
	organizing
	planning/preparing working processes and promoting
	marketing
	public relations and buying
	providing
	selling and to be supervisor
<b>Routine cognitive</b>	measuring
	controlling
	quality checks
<b>Routine manual</b>	fabricating
	producing goods and supervising
	controlling machines
	transporting
	stocking
<b>Non-routine manual</b>	posting
	repairing
	patching and nursing

	serving
	healing

For instance, consider the tasks performed by a legislator and a carpenter. Tables 9 and 10 respectively show how each task of a legislator and a carpenter is classified using the keywords and descriptions used in the literature. The bold words for each task are the primary consideration in the classification process and are matched with the corresponding keywords indicated by Autor and Acemoglu [2011], Spitz-Oener [2006], and Antonczyk et al. [2009]. The context of each task is also accounted for.

**Table 9. Task Classification for Legislators**

Tasks	Keywords			Task Type
	Autor and Acemoglu [2011]	Spitz-Oener [2006]	Antonczyk et al. [2009]	
<b>presiding</b> over or <b>participating</b> in the proceedings of legislative bodies and administrative councils of national, state, regional or local governments or legislative assemblies;	Guiding, directing and motivating subordinates	coordinating	organizing	Non-routine interpersonal
<b>determining, formulating and directing</b> policies of national, state, regional or local governments;	Analyzing data/information	researching; analyzing	developing; researching	Non-routine analytical
<b>making, ratifying, amending or repealing</b> laws, public rules and regulations within a statutory or constitutional framework;	Analyzing data/information	analyzing; working out rules/prescriptions; using and interpreting rules	developing; researching	Non-routine analytical
<b>serving</b> on government administrative boards or official committees;	Establishing and maintaining personal relationships	coordinating; entertaining or presenting; employing or managing personnel	public relations and buying; planning/preparing working processes and promoting; informing	Non-routine interpersonal

Tasks	Keywords			Task Type
	Autor and Acemoglu [2011]	Spitz-Oener [2006]	Antonczyk et al. [2009]	
<b>investigating</b> matters of concern to the public and promoting the interests of the constituencies which they represent;	Analyzing data/information	analyzing; working out rules/prescriptions; using and interpreting rules	investigating	Non-routine analytical
<b>attending</b> community functions and meetings to provide service to the community, understand public opinion and provide information on government plans;	Establishing and maintaining personal relationships	coordinating; organizing; entertaining or presenting	public relations and buying	Non-routine interpersonal
<b>negotiating</b> with other legislators and representatives of interest groups in order to reconcile differing interests, and to create policies and agreements;	Establishing and maintaining personal relationships	negotiating; lobbying	marketing; public relations and buying	Non-routine interpersonal
as members of the government, <b>directing</b> senior administrators and officials of government departments and agencies in the interpretation and implementation of government policies.	Guiding, directing and motivating subordinates	employing or managing personnel	advising and training; educating	Non-routine interpersonal

Source: Results of the author's classification process using ISCO-08

**Table 10. Task Classification for Carpenters and Joiners**

Tasks	Keywords			Task Type
	Autor and Acemoglu [2011]	Spitz-Oener [2006]	Antonczyk et al. [2009]	
<b>making, altering and repairing</b> structural and other woodwork at a workbench or on a construction site;	Spend time using hands to handle, control or feel objects, tools or controls	repairing or renovating houses/apartments/ machines/vehicles	repairing	Non-routine manual
<b>constructing, erecting and installing</b> heavy-framed wooden structures on building sites;	Manual dexterity			
<b>fitting, assembling and altering</b> internal and external fixtures of buildings, such as walls, doors, door and window frames, facings and panelling;	Manual dexterity			
<b>making, repairing and fitting</b> scenic equipment for theatrical performances and motion picture or television productions;	Spend time using hands to handle, control or feel objects, tools or controls			
<b>constructing, assembling, altering and repairing</b> wooden fixtures and fittings in train coaches, aircraft, ships, boats, floats and other vehicles.	Spend time using hands to handle, control or feel objects, tools or controls			

Source: Results of the author's classification process using ISCO-08

To derive the task portfolios of each occupation, we first compute the relative proportions of each task type per occupation. For example, from the eight tasks of a legislator, three (37.5%) are classified as non-routine analytical while the remaining five tasks (62.5%) as non-routine interpersonal (See Table 9). We can therefore conclude that to be effective and productive in his/her job, a legislator must primarily possess interpersonal skills combined with some cognitive skills. These ratios will serve as the factor or task scores which are then normalized with mean zero and standard deviation equal to one. Table 11 shows how these ratios are converted to normalized values for legislators and carpenters.

**Table 11. Normalized task scores for legislators and carpenters**

Task type	Legislator		Carpenters and joiners	
	Percentage	Normalized Values	Percentage	Normalized Values
Non-routine analytical	37.5%	0.485	0%	-0.829
Non-routine interpersonal	62.5%	1.976	0%	-0.742
Non-routine manual	0%	-0.745	100%	2.355
Routine manual	0%	-0.438	0%	-0.438
Routine cognitive	0%	-0.918	0%	-0.918

Source: Results of the author's classification process using ISCO-08

Applying this simple technique to the other occupations results in the construction of task-portfolios for the 424 occupations. A random verification of the assignment of task types was also done on 59 occupations (~14%) covering 100 tasks. The results of this classification process are presented in Table 5 below.



**Table 12. Task portfolios of occupations using the five-task classification scheme<sup>3</sup>**

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2411	<b>Accountants</b>	2.237	-0.742	-0.745	-0.438	-0.472
4311	<b>Accounting and Bookkeeping Clerks</b>	-0.128	-0.742	-0.745	-0.438	1.935
3313	<b>Accounting Associate Professionals</b>	0.923	-0.017	-0.745	-0.438	0.271
2655	<b>Actors</b>	-0.329	1.743	-0.745	-0.438	0.101
3343	<b>Administrative and Executive Secretaries</b>	-0.829	0.345	-0.745	-0.438	1.757
2431	<b>Advertising and Marketing Professionals</b>	2.286	-0.259	-0.745	-0.438	-0.918
1222	<b>Advertising and Public Relations Managers</b>	0.047	2.520	-0.745	-0.438	-0.918
1343	<b>Aged Care Services Managers</b>	0.572	1.433	-0.745	-0.438	-0.561
1311	<b>Agricultural and Forestry Production Managers</b>	0.631	1.433	-0.745	-0.438	-0.621
7233	<b>Agricultural and Industrial Machinery Mechanics and Repairers</b>	-0.829	-0.742	0.583	0.221	0.610
3142	<b>Agricultural Technicians</b>	1.118	-0.259	0.288	-0.438	-0.918
7127	<b>Air Conditioning and Refrigeration Mechanics</b>	0.047	-0.742	0.805	-0.438	-0.027
3154	<b>Air Traffic Controllers</b>	0.047	0.345	0.030	-0.438	-0.027
3155	<b>Air Traffic Safety Electronics Technicians</b>	0.728	0.225	-0.745	-0.438	0.271

<sup>3</sup> The results of the two-, three- and four-task classification process are available from the author upon request.

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
7232	<b>Aircraft Engine Mechanics and Repairers</b>	-0.479	-0.742	1.425	-0.438	-0.205
3153	<b>Aircraft Pilots and Related Associate Professionals</b>	0.172	-0.742	-0.303	0.221	0.610
3258	<b>Ambulance Workers</b>	-0.829	0.708	-0.229	-0.438	0.865
6129	<b>Animal Producers Not Elsewhere Classified</b>	-0.440	0.225	0.977	-0.438	-0.522
2656	<b>Announcers on Radio, Television and Other Media</b>	-0.128	0.998	-0.745	-0.438	0.508
2514	<b>Applications Programmers</b>	1.974	-0.742	-0.745	-0.438	-0.205
1312	<b>Aquaculture and Fisheries Production Managers</b>	0.249	1.935	-0.745	-0.438	-0.644
6221	<b>Aquaculture Workers</b>	-0.829	0.998	0.185	-0.438	0.152
2621	<b>Archivists and Curators</b>	1.273	-0.307	-0.745	-0.438	0.152
8219	<b>Assemblers Not Elsewhere Classified</b>	-0.829	-0.742	-0.125	-0.438	1.935
5161	<b>Astrologers, Fortune-tellers and Related Workers</b>	2.091	-0.017	-0.745	-0.438	-0.918
3421	<b>Athletes and Sports Players</b>	0.047	0.889	0.030	-0.438	-0.472
2266	<b>Audiologists and Speech Therapists</b>	0.172	0.501	-0.745	-0.438	0.610
2641	<b>Authors and Related Writers</b>	2.091	-0.742	-0.745	-0.438	-0.324
7512	<b>Bakers, Pastry-cooks and Confectionery Makers</b>	-0.829	-0.198	0.805	-0.438	0.419
4211	<b>Bank Tellers and Related Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
5132	<b>Bartenders</b>	-0.829	0.128	0.805	0.484	-0.561
5142	<b>Beauticians and Related Workers</b>	-0.391	-0.742	1.580	-0.438	-0.472
7234	<b>Bicycle and Related Repairers</b>	-0.829	-0.742	2.355	-0.438	-0.918
2131	<b>Biologists, Botanists, Zoologists and Related Professionals</b>	2.237	-0.742	-0.745	-0.438	-0.472
7221	<b>Blacksmiths, Hammersmiths and Forging Press Workers</b>	-0.829	-0.742	0.583	0.880	0.101
8154	<b>Bleaching, Dyeing and Fabric Cleaning Machine Operators</b>	-0.829	-0.742	-0.229	3.020	-0.621
4212	<b>Bookmakers, Croupiers and Related Gaming Workers</b>	0.572	-0.742	-0.125	-0.438	0.508
7112	<b>Bricklayers and Related Workers</b>	-0.829	-0.742	0.288	2.636	-0.918
3521	<b>Broadcasting and Audiovisual Technicians</b>	0.172	-0.742	-0.303	2.197	-0.918
7411	<b>Building and Related Electricians</b>	0.047	-0.742	0.805	-0.438	-0.027
2161	<b>Building Architects</b>	0.728	0.225	-0.745	-0.438	0.271
5153	<b>Building Caretakers</b>	-0.829	0.889	0.805	-0.438	-0.472
9313	<b>Building Construction Labourers</b>	-0.829	-0.742	1.838	0.331	-0.918
7119	<b>Building Frame and Related Trades Workers Not Elsewhere Classified</b>	-0.829	-0.742	1.321	1.099	-0.918
7133	<b>Building Structure Cleaners</b>	-0.829	-0.742	2.355	-0.438	-0.918
8331	<b>Bus and Tram Drivers</b>	-0.829	-0.742	1.912	0.221	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
3339	<b>Business Services Agents Not Elsewhere Classified</b>	-0.829	-0.017	-0.745	-0.438	2.054
1219	<b>Business Services and Administration Managers Not Elsewhere Classified</b>	0.923	1.433	-0.745	-0.438	-0.918
7511	<b>Butchers, Fishmongers and Related Food Preparers</b>	-0.829	-0.742	1.580	0.139	-0.472
3323	<b>Buyers</b>	-0.128	1.868	-0.745	-0.438	-0.205
7522	<b>Cabinet-makers and Related Workers</b>	-0.245	-0.742	1.321	0.331	-0.918
8322	<b>Car, Taxi and Van Drivers</b>	-0.829	-0.742	1.192	0.715	-0.472
7115	<b>Carpenters and Joiners</b>	-0.829	-0.742	2.355	-0.438	-0.918
2165	<b>Cartographers and Surveyors</b>	1.799	-0.198	-0.745	-0.438	-0.472
5230	<b>Cashiers and Ticket Clerks</b>	-0.829	-0.742	-0.745	0.139	2.203
8114	<b>Cement, Stone and Other Mineral Products Machine Operators</b>	-0.479	-0.742	-0.125	1.867	-0.205
3434	<b>Chefs</b>	0.222	1.433	-0.435	-0.438	-0.561
3111	<b>Chemical and Physical Science Technicians</b>	0.339	-0.742	0.288	0.331	-0.324
3116	<b>Chemical Engineering Technicians</b>	1.273	-0.742	-0.745	-0.438	0.508
2145	<b>Chemical Engineers</b>	2.237	-0.742	-0.745	-0.438	-0.472
3133	<b>Chemical Processing Plant Controllers</b>	-0.245	-0.742	-0.229	1.867	-0.324
8131	<b>Chemical Products Plant and Machine Operators</b>	-0.829	-0.742	-0.229	0.331	1.460
2113	<b>Chemists</b>	2.286	-0.259	-0.745	-0.438	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
1341	<b>Child Care Services Managers</b>	0.728	0.708	-0.745	-0.438	-0.126
5311	<b>Child Care Workers</b>	-0.391	1.433	-0.745	-0.438	0.419
9312	<b>Civil Engineering Labourers</b>	-0.829	-0.742	1.735	0.484	-0.918
3112	<b>Civil Engineering Technicians</b>	1.118	-0.742	-0.401	-0.438	0.271
2142	<b>Civil Engineers</b>	2.174	-0.121	-0.745	-0.438	-0.918
9112	<b>Cleaners and Helpers in Offices, Hotels and Other Establishments</b>	-0.829	-0.742	2.355	-0.438	-0.918
5151	<b>Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments</b>	-0.829	0.889	0.805	-0.438	-0.472
3331	<b>Clearing and Forwarding Agents</b>	-0.829	-0.742	-0.745	-0.438	2.648
4419	<b>Clerical Support Workers Not Elsewhere Classified</b>	-0.829	-0.742	-0.745	-0.438	2.648
4229	<b>Client Information Workers Not Elsewhere Classified</b>	-0.829	0.708	-0.745	-0.438	1.460
4413	<b>Coding, Proof-reading and Related clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
3322	<b>Commercial Sales Representatives</b>	-0.329	-0.121	-0.745	-0.438	1.629
3253	<b>Community Health Workers</b>	-0.128	2.737	-0.745	-0.438	-0.918
5162	<b>Companions and Valets</b>	-0.829	0.708	0.288	-0.438	0.271
3513	<b>Computer Network and Systems Technicians</b>	-0.245	-0.742	-0.745	-0.438	2.054
2523	<b>Computer Network Professionals</b>	1.674	-0.742	-0.745	-0.438	0.101

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
7114	<b>Concrete Placers, Concrete Finishers and Related Workers</b>	-0.829	-0.742	2.355	-0.438	-0.918
3332	<b>Conference and Event Planners</b>	-0.829	2.986	-0.745	-0.438	-0.409
1323	<b>Construction Managers</b>	0.127	1.630	-0.745	-0.438	-0.270
3123	<b>Construction Supervisors</b>	-0.829	2.158	-0.745	-0.438	0.271
4222	<b>Contact Centre Information Clerks</b>	-0.245	-0.742	-0.745	-0.438	2.054
5244	<b>Contact Centre Salespersons</b>	-0.829	1.976	-0.745	-0.438	0.419
5120	<b>Cooks</b>	-0.829	-0.017	0.805	0.331	-0.324
7549	<b>Craft and Related Workers Not Elsewhere Classified</b>	-0.829	-0.742	2.355	-0.438	-0.918
8343	<b>Crane, Hoist and Related Plant Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
2659	<b>Creative and Performing Artists Not Elsewhere Classified</b>	-0.829	3.607	-0.745	-0.438	-0.918
3312	<b>Credit and Loans Officers</b>	-0.245	-0.017	-0.745	-0.438	1.460
9211	<b>Crop Farm Labourers</b>	-0.829	-0.742	1.192	1.291	-0.918
3351	<b>Customs and Border Inspectors</b>	-0.391	-0.198	-0.358	0.139	0.865
7513	<b>Dairy Products Makers</b>	-0.829	-0.742	1.192	0.139	-0.027
2653	<b>Dancers and Choreographers</b>	-0.829	3.607	-0.745	-0.438	-0.918
4132	<b>Data Entry Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
2529	<b>Database and Network Professionals Not Elsewhere Classified</b>	0.485	0.345	-0.745	-0.438	0.419

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2521	<b>Database Designers and Administrators</b>	2.091	-0.742	-0.745	-0.438	-0.324
4214	<b>Debt Collectors and Related Workers</b>	-0.829	1.868	-0.745	-0.438	0.508
6223	<b>Deep-sea Fishery Workers</b>	-0.829	0.225	0.977	-0.438	-0.126
3251	<b>Dental Assistants and Therapists</b>	0.485	-0.742	1.192	-0.438	-0.918
2261	<b>Dentists</b>	-0.537	-0.017	-0.487	-0.438	1.460
2265	<b>Dieticians and Nutritionists</b>	0.673	1.122	-0.745	-0.438	-0.409
3254	<b>Dispensing Opticians</b>	0.923	0.345	-0.745	-0.438	-0.027
9111	<b>Domestic Cleaners and Helpers</b>	-0.829	-0.121	1.912	-0.438	-0.918
5152	<b>Domestic Housekeepers</b>	-0.829	0.225	1.321	-0.438	-0.522
5243	<b>Door-to-door Salespersons</b>	-0.829	0.501	-0.303	-0.438	1.120
3118	<b>Draughtspersons</b>	1.361	-0.742	-0.745	-0.438	0.419
9332	<b>Drivers of Animal-drawn Vehicles and Machinery</b>	-0.829	-0.742	1.666	0.075	-0.522
5165	<b>Driving Instructors</b>	0.339	2.158	-0.745	-0.438	-0.918
2342	<b>Early Childhood Educators</b>	-0.050	2.641	-0.745	-0.438	-0.918
8342	<b>Earthmoving and Related Plant Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
2631	<b>Economists</b>	2.675	-0.742	-0.745	-0.438	-0.918
1345	<b>Education Managers</b>	0.445	2.026	-0.745	-0.438	-0.918
2351	<b>Education Methods Specialists</b>	1.273	0.563	-0.745	-0.438	-0.561
8212	<b>Electrical and Electronic Equipment Assemblers</b>	-0.829	-0.742	-0.125	0.484	1.222
3113	<b>Electrical Engineering Technicians</b>	2.091	-0.742	-0.229	-0.438	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2151	<b>Electrical Engineers</b>	2.091	-0.017	-0.745	-0.438	-0.918
7413	<b>Electrical Line Installers and Repairers</b>	-0.245	-0.742	1.321	-0.438	-0.324
7412	<b>Electrical Mechanics and Fitters</b>	-0.829	-0.742	1.469	-0.438	0.101
3114	<b>Electronics Engineering Technicians</b>	1.674	-0.742	-0.745	-0.438	0.101
2152	<b>Electronics Engineers</b>	2.237	-0.742	-0.358	-0.438	-0.918
7421	<b>Electronics Mechanics and Servicers</b>	-0.050	-0.259	0.632	0.075	-0.522
9629	<b>Elementary Workers Not Elsewhere Classified</b>	-0.829	-0.742	-0.358	-0.438	2.203
3333	<b>Employment Agents and Contractors</b>	-0.245	1.433	-0.745	-0.438	0.271
2149	<b>Engineering Professionals Not Elsewhere Classified</b>	2.286	-0.259	-0.745	-0.438	-0.918
2263	<b>Environmental and Occupational Health and Hygiene Professionals</b>	1.624	0.128	-0.745	-0.438	-0.561
3257	<b>Environmental and Occupational Health Inspectors and Associates</b>	0.222	0.563	-0.745	-0.438	0.508
2143	<b>Environmental Engineers</b>	1.118	0.225	-0.745	-0.438	-0.126
2133	<b>Environmental Protection Professionals</b>	1.674	-0.121	-0.745	-0.438	-0.409
2132	<b>Farming, Forestry and Fisheries Advisers</b>	1.799	0.345	-0.745	-0.438	-0.918
5241	<b>Fashion and Other Models</b>	-0.829	3.607	-0.745	-0.438	-0.918



<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
9411	<b>Fast Food Preparers</b>	-0.829	-0.742	1.666	0.075	-0.522
8151	<b>Fibre Preparing, Spinning and Winding Machine Operators</b>	-0.829	-0.742	-0.229	3.404	-0.918
6111	<b>Field Crop and Vegetable Growers</b>	-0.511	0.049	1.509	-0.438	-0.918
4415	<b>Filing and Copying Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
2654	<b>Film, Stage and Related Directors and Producers</b>	0.172	2.365	-0.745	-0.438	-0.918
1211	<b>Finance Managers</b>	0.047	2.520	-0.745	-0.438	-0.918
2413	<b>Financial Analysts</b>	2.286	-0.742	-0.745	-0.438	-0.522
1346	<b>Financial and Insurance Services Branch Managers</b>	0.764	1.630	-0.745	-0.438	-0.918
2412	<b>Financial and Investment Advisers</b>	0.923	-0.017	-0.745	-0.438	0.271
5411	<b>Firefighters</b>	-0.829	-0.017	1.838	-0.438	-0.918
9216	<b>Fishery and Aquaculture Labourers</b>	-0.829	-0.742	2.355	-0.438	-0.918
3423	<b>Fitness and Recreation Instructors and Programme Leaders</b>	-0.245	2.158	-0.745	-0.438	-0.324
7122	<b>Floor Layers and Tile Setters</b>	-0.829	-0.742	0.805	1.867	-0.918
7515	<b>Food and Beverage Tasters and Graders</b>	-0.829	-0.742	-0.745	-0.438	2.648
8160	<b>Food and Related Products Machine Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
5246	<b>Food Service Counter Attendants</b>	-0.829	-0.198	0.417	1.291	-0.472
6210	<b>Forestry and Related Workers</b>	-0.128	0.128	0.185	0.945	-0.918
9215	<b>Forestry Labourers</b>	-0.829	-0.742	1.967	0.139	-0.918
3143	<b>Forestry Technicians</b>	0.222	1.433	-0.745	-0.438	-0.205

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
9333	<b>Freight Handlers</b>	-0.829	-0.742	0.288	1.867	-0.324
7514	<b>Fruit, Vegetable and Related Preservers</b>	-0.829	-0.742	2.355	-0.438	-0.918
7544	<b>Fumigators and Other Pest and Weed Controllers</b>	-0.829	-0.742	1.469	0.221	-0.409
8155	<b>Fur and Leather Preparing Machine Operators</b>	-0.829	-0.742	-0.464	3.753	-0.918
3433	<b>Gallery, Museum and Library Technicians</b>	-0.440	-0.742	-0.057	0.587	0.667
9611	<b>Garbage and Recycling Collectors</b>	-0.829	-0.742	1.580	0.715	-0.918
9214	<b>Garden and Horticultural Labourers</b>	-0.829	-0.742	1.666	0.587	-0.918
6113	<b>Gardeners, Horticultural and Nursery Growers</b>	-0.245	-0.017	1.321	-0.438	-0.918
7532	<b>Garment and Related Patternmakers and Cutters</b>	-0.829	-0.742	1.321	-0.438	0.271
4110	<b>General Office Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
2211	<b>Generalist Medical Practitioners</b>	1.082	-0.347	-0.745	-0.438	0.379
2114	<b>Geologists and Geophysicists</b>	2.675	-0.742	-0.745	-0.438	-0.918
8181	<b>Glass and Ceramics Plant Operators</b>	-0.829	-0.742	-0.507	3.818	-0.918
7315	<b>Glass Makers, Cutters, Grinders and Finishers</b>	-0.829	-0.742	0.447	-0.083	1.002
7125	<b>Glaziers</b>	0.047	-0.742	1.580	-0.438	-0.918
3354	<b>Government Licensing Officials</b>	-0.128	-0.742	-0.745	-0.438	1.935

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
3359	<b>Government Regulatory Associate Professionals Not Elsewhere Classified</b>	0.923	-0.742	-0.745	-0.438	0.865
3353	<b>Government Social Benefits Officials</b>	0.923	-0.742	-0.745	-0.438	0.865
3352	<b>Government Tax and Excise Officials</b>	1.799	-0.742	-0.745	-0.438	-0.027
2166	<b>Graphic and Multimedia Designers</b>	2.325	-0.307	-0.745	-0.438	-0.918
5141	<b>Hairdressers</b>	-0.829	-0.198	1.580	-0.438	-0.472
9331	<b>Hand and Pedal Vehicle Drivers</b>	-0.829	-0.742	0.495	0.484	0.508
9121	<b>Hand Launderers and Pressers</b>	-0.829	-0.742	2.355	-0.438	-0.918
9321	<b>Hand Packers</b>	-0.829	-0.742	-0.745	4.172	-0.918
7318	<b>Handicraft Workers in Textile, Leather and Related Materials</b>	-0.829	-0.742	2.133	-0.438	-0.663
7317	<b>Handicraft Workers in Wood, Basketry and Related Materials</b>	-0.829	-0.742	2.355	-0.438	-0.918
3259	<b>Health Associate Professionals Not Elsewhere Classified</b>	-0.829	0.889	-0.745	-0.438	1.311
5321	<b>Health Care Assistants</b>	-0.245	-0.742	1.838	-0.438	-0.918
2269	<b>Health Professionals Not Elsewhere Classified</b>	1.361	-0.198	-0.745	-0.438	-0.027
1342	<b>Health Services Managers</b>	0.222	1.868	-0.745	-0.438	-0.561
8332	<b>Heavy Truck and Lorry Drivers</b>	-0.829	-0.742	0.805	-0.438	0.865
5322	<b>Home-based Personal Care Workers</b>	-0.829	1.191	0.632	-0.438	-0.522

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
1411	<b>Hotel Managers</b>	-0.128	1.433	-0.745	-0.438	0.152
4224	<b>Hotel Receptionists</b>	-0.829	-0.742	-0.745	-0.438	2.648
7111	<b>House Builders</b>	-0.829	0.501	1.469	-0.438	-0.918
1212	<b>Human Resource Managers</b>	0.445	2.026	-0.745	-0.438	-0.918
6224	<b>Hunters and Trappers</b>	-0.829	-0.742	1.735	-0.438	-0.205
3132	<b>Incinerator and Water Treatment Plant Operators</b>	-0.391	-0.742	-0.745	1.291	0.865
2141	<b>Industrial and Production Engineers</b>	1.273	0.128	-0.745	-0.438	-0.205
7422	<b>Information and Communications Technology Installers and Servicers</b>	-0.829	-0.742	1.912	-0.438	-0.409
3511	<b>Information and Communications Technology Operations Technicians</b>	-0.829	0.345	-0.745	1.867	-0.027
2434	<b>Information and Communications Technology Sales Professionals</b>	-0.829	-0.121	-0.745	-0.438	2.139
1330	<b>Information and Communications Technology Services Managers</b>	-0.192	2.817	-0.745	-0.438	-0.918
3512	<b>Information and Communications Technology User Support Technicians</b>	-0.440	-0.259	-0.401	0.075	1.063
2356	<b>Information Technology Trainers</b>	1.507	0.708	-0.745	-0.438	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
6222	<b>Inland and Coastal Waters Fishery Workers</b>	-0.654	-0.307	0.960	-0.207	-0.027
4225	<b>Inquiry Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
7124	<b>Insulation Workers</b>	-0.829	-0.742	0.805	1.099	-0.324
3321	<b>Insurance Representatives</b>	0.339	1.433	-0.745	-0.438	-0.324
3432	<b>Interior Designers and Decorators</b>	1.974	0.128	-0.745	-0.438	-0.918
7313	<b>Jewellery and Precious metal Workers</b>	-0.511	-0.742	1.509	-0.438	-0.270
2642	<b>Journalists</b>	1.974	0.128	-0.745	-0.438	-0.918
2612	<b>Judges</b>	1.674	0.501	-0.745	-0.438	-0.918
9412	<b>Kitchen Helpers</b>	-0.829	-0.742	1.838	0.331	-0.918
2162	<b>Landscape Architects</b>	0.728	0.225	-0.745	-0.438	0.271
8157	<b>Laundry Machine Operators</b>	-0.829	-0.742	-0.401	3.148	-0.522
2611	<b>Lawyers</b>	0.923	1.433	-0.745	-0.438	-0.918
2619	<b>Legal Professionals Not Elsewhere Classified</b>	1.799	-0.742	-0.745	-0.438	-0.027
3342	<b>Legal Secretaries</b>	-0.829	-0.121	-0.745	-0.438	2.139
1111	<b>Legislators</b>	0.485	1.976	-0.745	-0.438	-0.918
2622	<b>Librarians and Related Information Professionals</b>	1.507	-0.742	-0.745	-0.438	0.271
4411	<b>Library Clerks</b>	-0.829	-0.017	-0.745	-0.438	2.054
3141	<b>Life Science Technicians (excluding Medical)</b>	0.249	-0.742	-0.745	-0.083	1.277
8344	<b>Lifting Truck Operators</b>	-0.829	-0.742	-0.125	0.484	1.222
6121	<b>Livestock and Dairy Producers</b>	-0.560	-0.073	1.162	-0.438	-0.369
9212	<b>Livestock Farm Labourers</b>	-0.829	-0.742	1.115	0.945	-0.561
8311	<b>Locomotive Engine Drivers</b>	-0.829	-0.742	1.115	0.484	-0.205

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
4412	<b>Mail Carriers and Sorting Clerks</b>	-0.829	-0.742	0.805	-0.438	0.865
2421	<b>Management and Organization Analysts</b>	1.118	0.225	-0.745	-0.438	-0.126
1120	<b>Managing Directors and Chief Executives</b>	1.082	1.235	-0.745	-0.438	-0.918
9329	<b>Manufacturing Labourers Not Elsewhere Classified</b>	-0.829	-0.742	0.805	1.867	-0.918
1321	<b>Manufacturing Managers</b>	1.215	1.070	-0.745	-0.438	-0.918
3122	<b>Manufacturing Supervisors</b>	0.339	2.158	-0.745	-0.438	-0.918
2120	<b>Mathematicians, Actuaries and Statisticians</b>	2.325	-0.307	-0.745	-0.438	-0.918
3115	<b>Mechanical Engineering Technicians</b>	1.361	-0.742	-0.358	-0.438	-0.027
2144	<b>Mechanical Engineers</b>	2.174	-0.742	-0.745	-0.438	-0.409
8211	<b>Mechanical Machinery Assemblers</b>	-0.829	-0.742	-0.125	-0.438	1.935
3214	<b>Medical and Dental Prosthetic Technicians</b>	-0.128	0.128	0.185	-0.438	0.152
3212	<b>Medical and Pathology Laboratory Technicians</b>	1.624	-0.742	-0.435	0.023	-0.561
3256	<b>Medical Assistants</b>	-0.829	0.128	-0.745	-0.438	1.935
3211	<b>Medical Imaging and Therapeutic Equipment Technicians</b>	0.047	0.345	-0.745	-0.438	0.865

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
3252	<b>Medical Records and Health Information Technicians</b>	-0.829	-0.017	-0.745	-0.438	2.054
3344	<b>Medical Secretaries</b>	0.047	0.345	-0.745	-0.438	0.865
9621	<b>Messengers, Package Deliverers and Luggage Porters</b>	-0.829	-0.742	-0.229	-0.438	2.054
8122	<b>Metal Finishing, Plating and Coating Machine Operators</b>	-0.829	-0.742	-0.745	3.020	-0.027
7211	<b>Metal Moulders and Coremakers</b>	-0.829	-0.742	2.355	-0.438	-0.918
7224	<b>Metal Polishers, Wheel Grinders and Tool Sharpeners</b>	-0.829	-0.742	0.140	0.221	1.120
8121	<b>Metal Processing Plant Operators</b>	-0.391	-0.742	-0.358	2.444	-0.472
3135	<b>Metal Production Process Controllers</b>	-0.829	1.122	-0.745	0.221	0.610
7223	<b>Metal Working Machine Tool Setters and Operators</b>	-0.829	-0.742	0.288	1.099	0.271
2112	<b>Meteorologists</b>	2.286	-0.742	-0.745	-0.438	-0.522
9623	<b>Meter Readers and Vending-machine Collectors</b>	-0.829	-0.742	-0.303	-0.438	2.139
3222	<b>Midwifery Associate professionals</b>	0.047	-0.742	0.030	-0.438	0.865
2222	<b>Midwifery Professionals</b>	0.047	-0.198	-0.745	-0.438	1.311
8112	<b>Mineral and Stone Processing Plant Operators</b>	-0.829	-0.742	-0.745	2.328	0.508
8111	<b>Miners and Quarriers</b>	-0.829	-0.742	0.288	2.123	-0.522
3117	<b>Mining and Metallurgical Technicians</b>	1.361	-0.742	-0.745	-0.438	0.419

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
9311	<b>Mining and Quarrying Labourers</b>	-0.829	-0.742	1.912	0.221	-0.918
2146	<b>Mining Engineers, Metallurgists and Related Professionals</b>	1.896	0.225	-0.745	-0.438	-0.918
1322	<b>Mining Managers</b>	1.273	0.998	-0.745	-0.438	-0.918
3121	<b>Mining Supervisors</b>	1.273	0.998	-0.745	-0.438	-0.918
6130	<b>Mixed Crop and Animal Producers</b>	-0.479	0.563	0.805	-0.438	-0.561
9213	<b>Mixed Crop and Livestock Farm Labourers</b>	-0.829	-0.742	1.227	0.820	-0.594
6114	<b>Mixed Crop Growers</b>	-0.511	0.049	1.509	-0.438	-0.918
8341	<b>Mobile Farm and Forestry Plant Operators</b>	-0.829	-0.742	0.805	1.867	-0.918
7231	<b>Motor Vehicle Mechanics and Repairers</b>	-0.829	-0.742	1.580	-0.438	-0.027
8321	<b>Motorcycle Drivers</b>	-0.829	-0.742	1.735	-0.438	-0.205
7312	<b>Musical Instrument Makers and Tuners</b>	-0.829	-0.742	1.227	-0.438	0.379
2652	<b>Musicians, Singers and Composers</b>	0.923	1.433	-0.745	-0.438	-0.918
3221	<b>Nursing Associate professionals</b>	-0.829	-0.017	0.288	-0.438	0.865
2221	<b>Nursing Professionals</b>	0.222	0.128	-0.435	-0.438	0.508
9622	<b>Odd-job Persons</b>	-0.829	-0.742	2.355	-0.438	-0.918
3341	<b>Office Supervisors</b>	-0.245	2.882	-0.745	-0.438	-0.918
2267	<b>Optometrists and Ophthalmic Opticians</b>	0.673	-0.121	-0.745	-0.438	0.610
2355	<b>Other Arts Teachers</b>	0.572	1.868	-0.745	-0.438	-0.918
9129	<b>Other Cleaning Workers</b>	-0.829	-0.742	2.355	-0.438	-0.918
2353	<b>Other Language Teachers</b>	1.361	-0.198	-0.745	-0.438	-0.027



<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2354	<b>Other Music Teachers</b>	0.764	1.235	-0.745	-0.438	-0.594
8183	<b>Packing, Bottling and Labelling Machine Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
7131	<b>Painters and Related Workers</b>	-0.829	-0.742	1.115	-0.438	0.508
8143	<b>Paper Products Machine Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
2240	<b>Paramedical Practitioners</b>	-0.050	-0.259	-0.745	-0.438	1.460
4213	<b>Pawnbrokers and Money-lenders</b>	-0.128	-0.742	-0.745	-0.438	1.935
4313	<b>Payroll Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
7535	<b>Pelt Dressers, Tanners and Fellmongers</b>	-0.829	-0.742	2.116	-0.438	-0.644
5329	<b>Personal Care Workers in Health Services Not Elsewhere Classified</b>	-0.829	-0.017	0.805	-0.438	0.271
5169	<b>Personal Services Workers Not Elsewhere Classified</b>	-0.829	2.158	-0.745	-0.438	0.271
2423	<b>Personnel and Careers Professionals</b>	1.974	-0.742	-0.745	-0.438	-0.205
4416	<b>Personnel Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
5164	<b>Pet Groomers and Animal Care Workers</b>	-0.829	0.225	0.977	-0.438	-0.126
3134	<b>Petroleum and Natural Gas Refining Plant Operators</b>	-0.128	-0.742	-0.745	2.328	-0.205
3213	<b>Pharmaceutical Technicians and Assistants</b>	-0.829	-0.742	-0.401	-0.438	2.252
2262	<b>Pharmacists</b>	0.788	0.262	-0.745	-0.438	0.179

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2633	<b>Philosophers, Historians and Political Scientists</b>	2.237	-0.198	-0.745	-0.438	-0.918
3431	<b>Photographers</b>	0.485	-0.742	0.417	0.715	-0.918
8132	<b>Photographic Products Machine Operators</b>	-0.391	-0.742	-0.745	3.020	-0.472
3119	<b>Physical and Engineering Science Technicians Not Elsewhere Classified</b>	1.273	-0.742	-0.745	0.484	-0.205
2111	<b>Physicists and Astronomers</b>	1.719	-0.742	-0.745	-0.438	0.055
2264	<b>Physiotherapists</b>	0.673	0.501	-0.745	-0.438	0.101
3255	<b>Physiotherapy Technicians and Assistants</b>	0.339	-0.017	-0.229	-0.438	0.271
7123	<b>Plasterers</b>	-0.829	-0.742	1.469	-0.438	0.101
8142	<b>Plastic Products Machine Operators</b>	-0.829	-0.742	0.583	1.538	-0.409
7126	<b>Plumbers and Pipe Fitters</b>	-0.128	-0.742	1.115	-0.438	-0.205
3355	<b>Police Inspectors and Detectives</b>	0.923	0.708	-0.229	-0.438	-0.918
5412	<b>Police Officers</b>	0.047	-0.742	1.580	-0.438	-0.918
2422	<b>Policy Administration Professionals</b>	2.174	-0.121	-0.745	-0.438	-0.918
1213	<b>Policy and Planning Managers</b>	-0.050	2.641	-0.745	-0.438	-0.918
7314	<b>Potters and Related Workers</b>	-0.829	-0.347	0.664	0.820	-0.270
6122	<b>Poultry Producers</b>	-0.537	0.345	1.063	-0.438	-0.621
3131	<b>Power Production Plant Operators</b>	-0.829	-0.742	-0.229	1.867	0.271
7311	<b>Precision-instrument Makers and Repairers</b>	-0.829	-0.742	0.805	-0.438	0.865
7321	<b>Pre-press Technicians</b>	-0.329	-0.742	-0.745	-0.438	2.139

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2341	<b>Primary School Teachers</b>	-0.128	1.868	-0.745	-0.438	-0.205
7323	<b>Print Finishing and Binding Workers</b>	-0.829	-0.121	-0.303	2.855	-0.918
7322	<b>Printers</b>	-0.829	-0.742	-0.401	0.587	1.460
5413	<b>Prison Guards</b>	-0.829	1.743	-0.303	0.221	-0.409
2163	<b>Product and Garment Designers</b>	2.286	-0.259	-0.745	-0.438	-0.918
7543	<b>Product Graders and Testers (excluding Foods and Beverages)</b>	-0.050	-0.259	-0.745	-0.438	1.460
4322	<b>Production Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
1349	<b>Professional Services Managers Not Elsewhere Classified</b>	0.339	2.158	-0.745	-0.438	-0.918
5419	<b>Protective Services Workers Not Elsewhere Classified</b>	-0.128	-0.742	1.735	-0.438	-0.918
2634	<b>Psychologists</b>	1.896	0.225	-0.745	-0.438	-0.918
2432	<b>Public Relations Professionals</b>	0.923	0.889	-0.745	-0.438	-0.472
8171	<b>Pulp and Papermaking Plant Operators</b>	-0.391	-0.198	-0.745	1.867	-0.027
8312	<b>Railway Brake, Signal and Switch Operators</b>	-0.829	-0.742	-0.745	2.328	0.508
3334	<b>Real Estate Agents and Property Managers</b>	-0.329	1.122	-0.745	-0.438	0.610
4226	<b>Receptionists (general)</b>	-0.829	-0.742	-0.745	-0.438	2.648
9612	<b>Refuse Sorters</b>	-0.829	-0.742	0.288	-0.438	1.460
3413	<b>Religious Associate Professionals</b>	-0.245	2.158	-0.745	-0.438	-0.324
2636	<b>Religious Professionals</b>	-0.440	3.124	-0.745	-0.438	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
1223	<b>Research and Development Managers</b>	0.047	2.520	-0.745	-0.438	-0.918
1412	<b>Restaurant Managers</b>	-0.479	1.433	-0.745	-0.438	0.508
1420	<b>Retail and Wholesale Trade Managers</b>	0.673	0.501	-0.745	-0.438	0.101
7215	<b>Riggers and Cable Splicers</b>	-0.829	-0.742	1.838	-0.438	-0.324
7121	<b>Roofers</b>	-0.245	-0.742	1.838	-0.438	-0.918
8141	<b>Rubber Products Machine Operators</b>	-0.829	-0.742	-0.229	2.636	-0.324
1221	<b>Sales and Marketing Managers</b>	0.047	2.520	-0.745	-0.438	-0.918
5242	<b>Sales Demonstrators</b>	-0.829	0.998	-0.745	-0.438	1.222
4414	<b>Scribes and Related Workers</b>	1.507	-0.742	-0.745	-0.438	0.271
2330	<b>Secondary Education Teachers</b>	0.445	0.840	-0.464	-0.438	-0.270
4120	<b>Secretaries (general)</b>	-0.829	-0.742	-0.745	-0.438	2.648
3311	<b>Securities and Finance Dealers and Brokers</b>	0.572	0.998	-0.745	-0.438	-0.205
5414	<b>Security Guards</b>	-0.829	-0.742	0.288	1.867	-0.324
1112	<b>Senior Government Officials</b>	1.118	1.191	-0.745	-0.438	-0.918
1114	<b>Senior Officials of Special-interest Organizations</b>	1.118	1.191	-0.745	-0.438	-0.918
5245	<b>Service Station Attendants</b>	-0.829	-0.742	1.192	0.139	-0.027
8153	<b>Sewing Machine Operators</b>	-0.829	-0.742	0.030	2.444	-0.472
7533	<b>Sewing, Embroidery and Related Workers</b>	-0.829	-0.742	2.096	-0.438	-0.621
7213	<b>Sheet Metal Workers</b>	0.172	-0.742	1.026	-0.438	-0.409

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
9334	<b>Shelf Fillers</b>	-0.829	-0.742	-0.358	0.139	1.757
8350	<b>Ships' Deck Crews and Related Workers</b>	-0.829	-0.742	2.355	-0.438	-0.918
3152	<b>Ships' Deck Officers and Pilots</b>	-0.391	0.345	-0.358	-0.438	0.865
3151	<b>Ships' Engineers</b>	-0.829	0.128	-0.125	-0.438	1.222
7536	<b>Shoemakers and Related Workers</b>	-0.290	-0.742	1.401	-0.438	-0.369
8156	<b>Shoemaking and Related Machine Operators</b>	-0.829	-0.742	-0.745	4.172	-0.918
5223	<b>Shop Sales Assistants</b>	-0.829	0.128	-0.745	0.484	1.222
5222	<b>Shop Supervisors</b>	-0.391	0.345	-0.745	-0.438	1.311
5221	<b>Shopkeepers</b>	0.673	-0.121	-0.745	-0.438	0.610
7542	<b>Shotfirers and Blasters</b>	-0.192	-0.742	0.100	-0.018	0.703
7316	<b>Signwriters, Decorative Painters, Engravers and Etchers</b>	0.422	-0.742	0.805	-0.438	-0.409
1344	<b>Social Welfare Managers</b>	0.923	1.433	-0.745	-0.438	-0.918
2635	<b>Social Work and Counselling Professionals</b>	0.764	1.235	-0.745	-0.438	-0.594
3412	<b>Social Work Associate Professionals</b>	0.923	1.433	-0.745	-0.438	-0.918
2632	<b>Sociologists, Anthropologists and Related Professionals</b>	2.675	-0.742	-0.745	-0.438	-0.918
2519	<b>Software and Applications Developers and Analysts Not Elsewhere Classified</b>	1.273	-0.742	-0.745	-0.438	0.508
2512	<b>Software Developers</b>	1.799	0.345	-0.745	-0.438	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
2352	<b>Special Needs Teachers</b>	0.127	1.235	-0.745	-0.438	0.055
2212	<b>Specialist Medical Practitioners</b>	0.339	-0.379	-0.745	-0.438	1.162
3422	<b>Sports Coaches, Instructors and Officials</b>	0.764	0.444	-0.745	-0.438	0.055
1431	<b>Sports, Recreation and Cultural Centre Managers</b>	0.339	0.225	-0.745	-0.438	0.667
7132	<b>Spray Painters and Varnishers</b>	-0.829	-0.742	2.355	-0.438	-0.918
5211	<b>Stall and Market Salespersons</b>	-0.329	-0.121	-0.303	0.221	0.610
4312	<b>Statistical, Finance and Insurance Clerks</b>	0.572	-0.742	-0.745	-0.438	1.222
3314	<b>Statistical, Mathematical and Related Associate Professionals</b>	2.237	-0.198	-0.745	-0.438	-0.918
8182	<b>Steam Engine and Boiler Operators</b>	-0.329	-0.742	-0.303	0.880	0.610
4321	<b>Stock Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
7113	<b>Stonemasons, Stone cutters, Splitters and Carvers</b>	-0.829	-0.742	1.912	-0.438	-0.409
9510	<b>Street and Related Services Workers</b>	-0.829	-0.198	1.580	-0.438	-0.472
5212	<b>Street Food Salespersons</b>	-0.829	-0.742	1.115	-0.438	0.508
9520	<b>Street Vendors (excluding Food)</b>	-0.829	0.128	-0.125	-0.438	1.222
7214	<b>Structural Metal Preparers and Erectors</b>	-0.829	-0.742	1.838	-0.438	-0.324
6310	<b>Subsistence Crop Farmers</b>	-0.829	-0.742	1.912	-0.438	-0.409
6340	<b>Subsistence Fishers, Hunters, Trappers and Gatherers</b>	-0.829	-0.742	1.967	-0.438	-0.472

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
6320	<b>Subsistence Livestock Farmer</b>	-0.829	-0.379	1.321	-0.438	-0.027
6330	<b>Subsistence Mixed Crop and Livestock Farmers</b>	-0.829	-0.742	2.010	-0.438	-0.522
1324	<b>Supply, Distribution and Related Managers</b>	0.631	1.795	-0.745	-0.438	-0.918
4227	<b>Survey and Market Research Interviewers</b>	-0.128	0.998	-0.745	-0.438	0.508
9613	<b>Sweepers and Related Labourers</b>	-0.829	-0.742	1.580	0.715	-0.918
2522	<b>Systems Administrators</b>	0.572	-0.742	-0.745	-0.438	1.222
2511	<b>Systems Analysts</b>	1.674	0.501	-0.745	-0.438	-0.918
7531	<b>Tailors, Dressmakers, Furriers and Hatters</b>	-0.829	-0.742	1.509	-0.438	0.055
5312	<b>Teachers' Aides</b>	-0.829	1.743	-0.303	0.221	-0.409
2359	<b>Teaching Professionals Not Elsewhere Classified</b>	0.445	2.026	-0.745	-0.438	-0.918
2433	<b>Technical and Medical Sales Professionals (excluding ICT)</b>	0.631	0.345	-0.745	-0.438	0.271
3522	<b>Telecommunications Engineering Technicians</b>	1.974	0.128	-0.745	-0.438	-0.918
2153	<b>Telecommunications Engineers</b>	2.174	-0.742	-0.303	-0.438	-0.918
4223	<b>Telephone Switchboard Operators</b>	-0.128	-0.742	-0.745	0.484	1.222
8159	<b>Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified</b>	-0.829	-0.742	-0.745	4.172	-0.918

<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
7516	<b>Tobacco Preparers and Tobacco Products Makers</b>	-0.829	-0.742	1.735	-0.438	-0.205
7222	<b>Toolmakers and Related Workers</b>	0.127	-0.742	0.382	-0.018	0.055
2164	<b>Town and Traffic Planners</b>	2.237	-0.198	-0.745	-0.438	-0.918
3324	<b>Trade Brokers</b>	-0.245	0.708	-0.745	-0.438	0.865
3230	<b>Traditional and Complementary Medicine Associate Professionals</b>	0.339	0.708	-0.229	-0.438	-0.324
2230	<b>Traditional and Complementary Medicine Professionals</b>	0.172	1.122	-0.745	-0.438	0.101
1113	<b>Traditional Chiefs and Heads of Villages</b>	-0.329	2.986	-0.745	-0.438	-0.918
2424	<b>Training and Staff Development Professionals</b>	1.361	0.889	-0.745	-0.438	-0.918
2643	<b>Translators, Interpreters and Other Linguists</b>	1.507	-0.742	-0.745	-0.438	0.271
4323	<b>Transport Clerks</b>	-0.829	-0.742	-0.745	-0.438	2.648
5112	<b>Transport Conductors</b>	-0.829	0.128	-0.435	0.945	0.508
5111	<b>Travel Attendants and Travel Stewards</b>	-0.829	0.840	0.100	-0.438	0.379
4221	<b>Travel Consultants and Clerks</b>	-0.329	-0.742	-0.745	-0.438	2.139
5113	<b>Travel Guides</b>	-0.829	1.191	-0.401	-0.438	0.667
6112	<b>Tree and Shrub Crop Growers</b>	-0.511	0.049	1.509	-0.438	-0.918
4131	<b>Typists and Word Processing Operators</b>	-0.829	-0.742	-0.745	-0.438	2.648
5163	<b>Undertakers and Embalmers</b>	-0.829	0.708	0.805	-0.438	-0.324



<b>PSOC</b>	<b>occupation</b>	<b>non-routine analytical</b>	<b>non-routine interpersonal</b>	<b>non-routine manual</b>	<b>routine manual</b>	<b>routine cognitive</b>
7541	<b>Underwater Divers</b>	-0.537	-0.017	0.805	-0.438	-0.027
2310	<b>University and Higher Education Teachers</b>	0.339	1.674	-0.745	-0.438	-0.522
7534	<b>Upholsterers and Related Workers</b>	-0.245	-0.017	1.321	-0.438	-0.918
3315	<b>Valuers and Loss Assessors</b>	1.273	-0.742	-0.745	-0.438	0.508
9122	<b>Vehicle Cleaners</b>	-0.829	-0.742	2.355	-0.438	-0.918
2250	<b>Veterinarians</b>	0.339	-0.742	-0.745	-0.438	1.460
3240	<b>Veterinary Technicians and Assistants</b>	-0.128	-0.742	1.425	-0.438	-0.561
2651	<b>Visual Artists</b>	2.675	-0.742	-0.745	-0.438	-0.918
2320	<b>Vocational Education Teachers</b>	0.572	1.433	-0.745	-0.438	-0.561
5131	<b>Waiters</b>	-0.829	1.122	1.026	-0.438	-0.918
9624	<b>Water and Firewood Collectors</b>	-0.829	-0.742	2.355	-0.438	-0.918
8152	<b>Weaving and Knitting Machine Operators</b>	-0.829	-0.742	-0.269	3.108	-0.644
2513	<b>Web and Multimedia Developers</b>	1.974	0.128	-0.745	-0.438	-0.918
3514	<b>Web Technicians</b>	0.172	0.501	-0.745	-0.438	0.610
7212	<b>Welders and Flame Cutters</b>	-0.829	-0.742	1.192	0.715	-0.472
8113	<b>Well Drillers and Borers and Related Workers</b>	-0.829	-0.307	0.185	1.406	-0.205
8172	<b>Wood Processing Plant Operators</b>	-0.829	-0.742	-0.125	3.250	-0.918
7521	<b>Wood Treaters</b>	-0.829	-0.742	0.417	1.867	-0.472
7523	<b>Woodworking Machine Tool Setters and Operators</b>	-0.829	-0.742	0.288	1.099	0.271

Source: Results of the author's classification process using ISCO-08

From Table 12, we can identify which occupations are the most (and least) intensive in certain task types. These are occupations which have the highest (lowest) value for a task type. In summary, these portfolios allow us to measure how intensive an occupation is in performing different tasks (e.g. non-routine analytical, non-routine interpersonal, non-routine manual, routine cognitive and routine manual).

Table 13 lists the top five occupations that are most intensive in the task characteristics described according to the five-dimensional task complexity space. The resulting list seems intuitive enough. For example, those occupations intensive in tasks under the non-routine analytical category require the use of cognitive skills such as creativity, mathematical ability, and analysis of scientific and social phenomena. On the other hand, interaction with other people through direct, personal encounters, such as through dialogues and performances, characterizes those tasks under the category non-routine interpersonal. Those occupations under non-routine manual require manual dexterity and spending time using hands to handle, control or feel objects, tools or controls while those occupations intensive in routine cognitive tasks involve repetitive processes and a high level of accuracy. Routine manual intensive occupations usually control machines and processes in repetitive motions.

**Table 13. Top occupations by task intensity**

<b>Non-routine analytical</b>	<b>Non-routine interpersonal</b>	<b>Non-routine manual</b>	<b>Routine cognitive</b>	<b>Routine manual</b>
Economists	Creative and Performing Artists Not Elsewhere Classified	Bicycle and Related Repairers	Bank Tellers and Related Clerks	Crane, Hoist and Related Plant Operators
Geologists and Geophysicists	Dancers and Choreographers	Building Structure Cleaners	Clearing and Forwarding Agents	Earthmoving and Related Plant Operators
Sociologists, Anthropologists and Related Professionals	Fashion and Other Models	Carpenters and Joiners	Clerical Support Workers Not Elsewhere Classified	Food and Related Products Machine Operators
Visual Artists	Religious Professionals	Cleaners and Helpers in Offices, Hotels	Coding, Proof-reading and Related clerks	Hand Packers

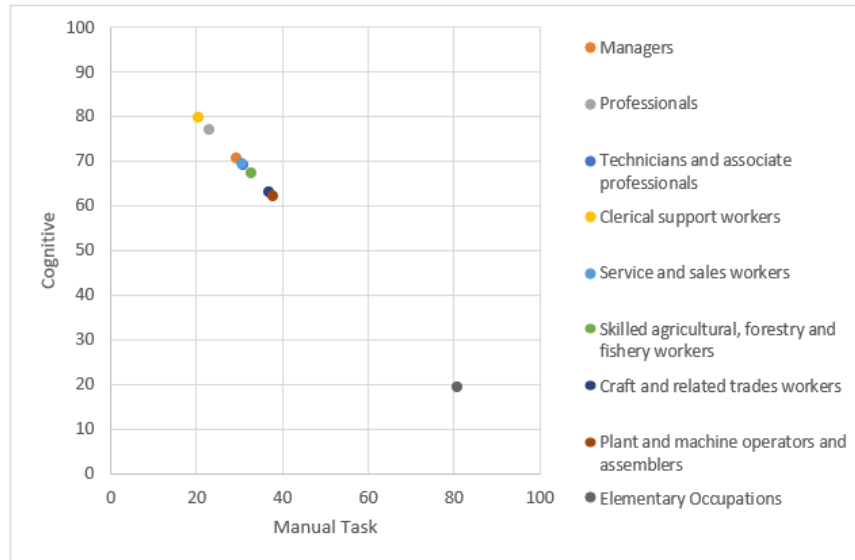
<b>Non-routine analytical</b>	<b>Non-routine interpersonal</b>	<b>Non-routine manual</b>	<b>Routine cognitive</b>	<b>Routine manual</b>
		and Other Establishments		
Mathematicians, Actuaries and Statisticians	Traditional Chiefs and Heads of Villages	Concrete Placers, Concrete Finishers and Related Workers	Data Entry Clerks	Packing, Bottling and Labelling Machine Operators

Source: Results of the author's classification process using ISCO-08

As mentioned above, the five-task classification scheme can be collapsed into fewer but broader task types. Suppose we adopt the two-task -- cognitive-manual -- type classification scheme, and apply it to the major occupation groups. Figure 1 shows us a mapping of the major occupation groups in a two-dimensional task complexity space where the dimensions are the task intensities of manual and cognitive tasks.

To derive the x-coordinates above, the average manual task intensities of all occupations for each major occupation group are computed. The same process is implemented for the calculation of the y-coordinates by considering the cognitive task intensity of occupations.

All the major occupation groups have the expected levels of intensity for each task type. For example, professionals, clerical support workers and managers have the highest level of cognitive task intensity.



**Figure 1. Major Occupation Groups in the Cognitive-Manual Task Space**

Source: Author's calculations using ISCO-08

Note: This can be extended into n-dimensional task complexity space where n refers to the number of task types describing an occupation.

The use of ISCO-08 as a basis for mapping tasks with occupations leads to a characterization of occupations in the PSOC in terms of tasks. This study's estimation of task intensity results above can be compared with the findings reported in the third wave of the World Bank's Skills Towards Employability and Productivity (STEP) Household Survey<sup>4</sup> in the Philippines. This survey measures individual skill competencies and documents self-reported information on personality, behavior, time and risk preferences and job-relevant skills that respondents possess or use in their jobs. However, there are certain limitations inherent in self-reported surveys such as the STEP of World Bank, PIACC Survey of Adult Skills of OECD and Germany's QCS. The subjectivity of worker responses becomes problematic when they have incomplete information about the nature of their job. Another problem as noted by Autor and Handel [2013: S62] with datasets, such as the US' O\*NET is that they do not provide job characteristics at the individual worker level which makes "analysis of within occupation heterogeneity in task demands and its relationship to earnings infeasible." Autor and Handel [2013] also point out the infrequency of updating the

<sup>4</sup> However, the STEP Household Survey might have captured only a limited number of occupations since it only interviewed 3,000 individuals located in urban areas.

occupation characteristics making it difficult to come up with reliable evolving occupational task contents.

The task classification process of occupations using ISCO-08 provides a good benchmark and guide for countries which also use ISCO-08 as the basis of their local occupation classifications. The characterization of occupations resulting from the methodology employed in this paper can be compared with the existing and commonly used datasets in the task-based literature. However, it must be noted that the methodology used in this study does not identify and account for the relative intensity of each task per occupation. That is, we do not have information on how more frequent and thus more intensive a task of a legislator is, say making, ratifying, amending or repealing laws, as compared to attending community functions and meetings. This paper considered the relative proportion of tasks similar in nature to characterize the task portfolio of each occupation. Up to this point, this is the drawback of the methodology used in this paper as compared with the self-reported surveys cited above.

### **Some conclusions and ways forward**

Treating occupations as bundles of tasks does not only expand the human capital literature but also explains other labor market phenomena such as the job polarization in the US and Europe. In lieu of rapid technological progress, the ‘routinization hypothesis’ of Autor et al. (2003) seems to play a key role in the labor market structure of economies. The impact of the fourth industrial revolution or the automation of jobs due to robotization and computerization to developing countries is not yet fully explored. An important step in undertaking research on this subject requires an understanding of the task contents of local occupations. The STEP Household and Employer Surveys of World Bank attempt to collect these data by estimating the individual and firm perspectives on skill competencies which include personality, behavior, time and risk preferences of workers. Cost considerations limit the scope of these kinds of surveys. The self-reported nature of these data gathering techniques also poses some concerns. Nevertheless, these surveys provide us with a rich perspective on the demand and supply of skills in the labor market. The results of the simple classification process of this paper can be an impetus for further studies exploring the task complexity nature of occupations in the Philippines or in other countries which base their local occupational codes to the International Standard Classification of Occupations. Occupational distances can also be estimated from these task portfolios of occupations such as in Generalao

[2019]. Apart from analyzing the implications of automation, immigration, and international offshoring on employment and the returns to specific skills, further research on labor mobility patterns, skill transferability and wage differentials can now be pursued using these measures. Comparing occupations based on their task contents opens a new realm of research on human capital.

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## APPENDIX

### Mapping of all tasks (n=3,279) to task categories (n=5)

PSOC	occupations	tasks	task type
1111	Legislators	presiding over or participating in the proceedings of legislative bodies and administrative councils of national, state, regional or local governments or legislative assemblies;	Non-routine interpersonal
1111	Legislators	determining, formulating and directing policies of national, state, regional or local governments;	Non-routine analytical
1111	Legislators	making, ratifying, amending or repealing laws, public rules and regulations within a statutory or constitutional framework;	Non-routine analytical
1111	Legislators	serving on government administrative boards or official committees;	Non-routine interpersonal
1111	Legislators	investigating matters of concern to the public and promoting the interests of the constituencies which they represent;	Non-routine analytical
1111	Legislators	attending community functions and meetings to provide service to the community, understand public opinion and provide information on government plans;	Non-routine interpersonal
1111	Legislators	negotiating with other legislators and representatives of interest groups in order to reconcile differing interests, and to create policies and agreements;	Non-routine interpersonal

1111	Legislators	as members of the government, directing senior administrators and officials of government departments and agencies in the interpretation and implementation of government policies.	Non-routine interpersonal
1112	Senior Government Officials	advising national, state, regional or local governments and legislators on policy matters;	Non-routine analytical
1112	Senior Government Officials	advising on the preparation of government budgets, laws and regulations, including amendments;	Non-routine analytical
1112	Senior Government Officials	establishing objectives for government departments or agencies in accordance with government legislation and policy;	Non-routine analytical
1112	Senior Government Officials	formulating or approving and evaluating programmes and procedures for the implementation of government policies in conjunction or consultation with government,	Non-routine analytical
1112	Senior Government Officials	recommending, reviewing, evaluating and approving documents, briefs and reports submitted by middle managers and senior staff members;	Non-routine analytical
1112	Senior Government Officials	ensuring appropriate systems and procedures are developed and implemented to provide budgetary control;	Non-routine interpersonal
1112	Senior Government Officials	coordinating activities with other senior government managers and officials;	Non-routine interpersonal
1112	Senior Government Officials	making presentations to legislative and other government committees regarding policies, programmes or budgets;	Non-routine interpersonal

1112	Senior Government Officials	overseeing the interpretation and implementation of government policies and legislation by government departments and agencies.	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	allocating the use of communal land and other resources among households in the community or village;	Non-routine analytical
1113	Traditional Chiefs and Heads of Villages	collecting and distributing surplus production of the community or village;	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	settling disputes between members of the community or village;	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	disciplining members of the community or village for violation of rules and customs;	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	performing ceremonial duties in connection with births, marriages, deaths, harvests and other important occasions;	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	representing the community or village on local or regional councils;	Non-routine interpersonal
1113	Traditional Chiefs and Heads of Villages	informing the community or village about government rules and regulations.	Non-routine interpersonal
1114	Senior Officials of Special-interest Organizations	determining and formulating the policies, rules and regulations of the organization;	Non-routine analytical
1114	Senior Officials of Special-interest Organizations	planning, directing and coordinating the general functioning of the organization;	Non-routine analytical

1114	Senior Officials of Special-interest Organizations	reviewing the operations and results of the organization and reporting to boards of directors and governing bodies, the organization's membership and funding agencies;	Non-routine analytical
1114	Senior Officials of Special-interest Organizations	negotiating on behalf of the organization, its members and relevant special-interest groups;	Non-routine interpersonal
1114	Senior Officials of Special-interest Organizations	promoting the interests of the organization, its members and relevant special-interest groups before the legislature, government or general public;	Non-routine interpersonal
1114	Senior Officials of Special-interest Organizations	planning, organizing and directing sections charged with implementing the organization's policies, programmes, rules and regulations;	Non-routine analytical
1114	Senior Officials of Special-interest Organizations	ensuring appropriate systems and procedures are developed and implemented to provide budgetary control;	Non-routine interpersonal
1114	Senior Officials of Special-interest Organizations	monitoring and evaluating performance of the organization or enterprise against established objectives and policies;	Non-routine analytical
1114	Senior Officials of Special-interest Organizations	representing the organization at official occasions and board meetings, in negotiations and at conventions, public hearings and forums.	Non-routine interpersonal
1120	Managing Directors and Chief Executives	planning, directing and coordinating the general functioning of an enterprise or organization;	Non-routine analytical
1120	Managing Directors and Chief Executives	reviewing the operations and results of the enterprise or organization and reporting to boards of directors and governing bodies;	Non-routine analytical

1120	Managing Directors and Chief Executives	determining objectives, strategies, policies and programmes for the enterprise or organization;	Non-routine analytical
1120	Managing Directors and Chief Executives	providing overall leadership and management to the enterprise or organization;	Non-routine interpersonal
1120	Managing Directors and Chief Executives	establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1120	Managing Directors and Chief Executives	authorizing material, human and financial resources to implement organizational policies and programmes;	Non-routine interpersonal
1120	Managing Directors and Chief Executives	monitoring and evaluating performance of the organization or enterprise against established objectives and policies;	Non-routine analytical
1120	Managing Directors and Chief Executives	consulting with senior subordinate staff and reviewing recommendations and reports;	Non-routine interpersonal
1120	Managing Directors and Chief Executives	representing the organization at official occasions and board meetings, in negotiations and at conventions, seminars, public hearings and forums;	Non-routine interpersonal
1120	Managing Directors and Chief Executives	selecting or approving the selection of senior staff;	Non-routine analytical
1120	Managing Directors and Chief Executives	ensuring the organization complies with relevant legislation and regulations.	Non-routine interpersonal
1211	Finance Managers	planning, directing and coordinating the financial operations of an enterprise or organization;	Non-routine interpersonal

1211	Finance Managers	assessing the financial situation of the enterprise or organization, preparing budgets and overseeing financial operations;	Non-routine analytical
1211	Finance Managers	consulting with the chief executive and with managers of other departments or sections;	Non-routine interpersonal
1211	Finance Managers	establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1211	Finance Managers	establishing and directing operational and administrative procedures;	Non-routine interpersonal
1211	Finance Managers	planning and directing daily operations;	Non-routine interpersonal
1211	Finance Managers	overseeing the selection, training and performance of staff;	Non-routine interpersonal
1211	Finance Managers	representing the enterprise or organization in dealings with outside bodies.	Non-routine interpersonal
1212	Human Resource Managers	planning, directing and coordinating the personnel and industrial relations activities, policies and practices of an enterprise or organization;	Non-routine analytical
1212	Human Resource Managers	planning and organizing procedures for recruitment, training, promotion, transfer and dismissal of staff;	Non-routine analytical
1212	Human Resource Managers	planning and organizing negotiations and procedures for determination of wage structures and level and for consultation with workers on conditions of employment;	Non-routine analytical
1212	Human Resource Managers	overseeing safety, health and related programmes and activities;	Non-routine interpersonal
1212	Human Resource Managers	establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical

1212	Human Resource Managers	establishing and directing operational and administrative procedures;	Non-routine interpersonal
1212	Human Resource Managers	overseeing the development and implementation of management information systems;	Non-routine interpersonal
1212	Human Resource Managers	ensuring compliance with standards and legislation relating to employees' rights, health and safety, equal opportunity and related concerns;	Non-routine interpersonal
1212	Human Resource Managers	overseeing the selection, training and performance of staff for the entire enterprise or organization;	Non-routine interpersonal
1212	Human Resource Managers	consulting with senior management and with managers of other departments;	Non-routine interpersonal
1212	Human Resource Managers	representing the enterprise or organization in dealings with outside bodies.	Non-routine interpersonal
1213	Policy and Planning Managers	(a) developing, implementing and monitoring strategic plans, programmes, policies, processes, systems and procedures to achieve goals, objectives and work standards;	Non-routine analytical
1213	Policy and Planning Managers	(b) developing, directing, administering and participating in policy research and analysis;	Non-routine analytical
1213	Policy and Planning Managers	(c) coordinating the implementation of policies and practices;	Non-routine interpersonal
1213	Policy and Planning Managers	(d) establishing activity measures and measurements of accountability;	Non-routine interpersonal
1213	Policy and Planning Managers	(e) planning and directing daily operations;	Non-routine interpersonal

1213	Policy and Planning Managers	(f) leading and managing the activities of policy development and strategic planning staff;	Non-routine interpersonal
1213	Policy and Planning Managers	(g) overseeing the selection, training and performance of staff;	Non-routine interpersonal
1213	Policy and Planning Managers	(h) consulting with senior management and with managers of other departments;	Non-routine interpersonal
1213	Policy and Planning Managers	(i) representing the enterprise or organization in negotiations, and at conventions, seminars, public hearings and forums.	Non-routine interpersonal
1219	Business Services and Administration Managers Not Elsewhere Classified	(a) providing administrative, strategic planning and operational support, research and advice to senior management on matters such as the management of building facilities and administrative services;	Non-routine analytical
1219	Business Services and Administration Managers Not Elsewhere Classified	(b) developing and managing the organization's administrative and physical resources;	Non-routine interpersonal
1219	Business Services and Administration Managers Not Elsewhere Classified	(c) developing and implementing administrative and procedural statements and guidelines for use by staff in the organization;	Non-routine analytical
1219	Business Services and Administration Managers Not Elsewhere Classified	(d) analysing complex resource management issues and initiatives that affect the organization, and preparing associated reports, correspondence and submissions;	Non-routine analytical



1219	Business Services and Administration Managers Not Elsewhere Classified	(e) providing information and support for the preparation of financial reports and budgets;	Non-routine analytical
1219	Business Services and Administration Managers Not Elsewhere Classified	(f) leading, managing and developing administrative staff to ensure smooth business operations and the provision of accurate and timely information;	Non-routine interpersonal
1219	Business Services and Administration Managers Not Elsewhere Classified	(g) representing the enterprise or organization in negotiations, and at conventions, seminars, public hearings and forums;	Non-routine interpersonal
1219	Business Services and Administration Managers Not Elsewhere Classified	(h) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1219	Business Services and Administration Managers Not Elsewhere Classified	(i) planning and directing daily operations;	Non-routine interpersonal
1219	Business Services and Administration Managers Not Elsewhere Classified	(j) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1221	Sales and Marketing Managers	(a) planning and organizing special sales and marketing programmes based on sales records and market assessments;	Non-routine interpersonal

1221	Sales and Marketing Managers	(b) determining price lists, discount and delivery terms, sales promotion budgets, sales methods, special incentives and campaigns;	Non-routine analytical
1221	Sales and Marketing Managers	(c) establishing and directing operational and administrative procedures related to sales and marketing activities;	Non-routine interpersonal
1221	Sales and Marketing Managers	(d) leading and managing the activities of sales and marketing staff;	Non-routine interpersonal
1221	Sales and Marketing Managers	(e) planning and directing daily operations;	Non-routine interpersonal
1221	Sales and Marketing Managers	(f) establishing and managing budgets and controlling expenditure to ensure the efficient use of resources;	Non-routine analytical
1221	Sales and Marketing Managers	(g) overseeing the selection, training and performance of staff;	Non-routine interpersonal
1221	Sales and Marketing Managers	(h) representing the enterprise or organization at sales and marketing conventions, trade exhibitions and other forums.	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(a) planning, directing and coordinating the advertising and public relations activities of an enterprise or organization;	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(b) negotiating advertising contracts with clients or with newspapers, radio and television stations, sports and cultural organizations and advertising agencies;	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(c) 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 organization;	Non-routine analytical

1222	Advertising and Public Relations Managers	(d) leading and managing the activities of advertising and public relations staff;	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(e) establishing and managing budgets and controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1222	Advertising and Public Relations Managers	(f) establishing and directing operational and administrative procedures;	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(g) planning and directing daily operations;	Non-routine interpersonal
1222	Advertising and Public Relations Managers	(h) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1223	Research and Development Managers	(a) planning, directing and coordinating research and development activities, in-house or commissioned from external research organizations, to develop new or improved technical processes, products, knowledge, or utilization of materials;	Non-routine interpersonal
1223	Research and Development Managers	(b) planning the overall research and development programme of an enterprise or organization, specifying goals and budgetary requirements;	Non-routine analytical
1223	Research and Development Managers	(c) leading and managing the activities of research and development staff;	Non-routine interpersonal
1223	Research and Development Managers	(d) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1223	Research and Development Managers	(e) establishing and directing operational and administrative procedures;	Non-routine interpersonal
1223	Research and Development Managers	(f) planning and directing daily operations;	Non-routine interpersonal

1223	Research and Development Managers	(g) overseeing the selection, training and performance of staff;	Non-routine interpersonal
1223	Research and Development Managers	(h) representing the enterprise or organization at conventions, seminars and conferences.	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	monitoring agricultural and forestry market activity and planning production to meet contract requirements and market demand	Non-routine analytical
1311	Agricultural and Forestry Production Managers	establishing and managing budgets, monitoring production output and costs, recording information such as farm management practices, and preparing financial and operational reports	Non-routine analytical
1311	Agricultural and Forestry Production Managers	conferring with buyers to arrange for the sale of crops and livestock	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	contracting with farmers or independent owners for production of crops and livestock, or for management of production	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	planning the type, intensity and sequence of farm operations (e.g. determining the best times for planting, spraying and harvesting)	Non-routine analytical
1311	Agricultural and Forestry Production Managers	analysing soil to determine types and quantities of fertilizer required for maximum production	Non-routine analytical
1311	Agricultural and Forestry Production Managers	purchasing machinery, equipment and supplies such as tractors, seed, fertilizer and chemicals	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	identifying and controlling agricultural and forest environmental toxins, weeds, pests and diseases	Non-routine analytical

1311	Agricultural and Forestry Production Managers	organizing farming operations such as maintaining buildings, water supply systems and equipment	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	directing and coordinating activities such as planting, irrigation, chemical application, harvesting and grading	Non-routine interpersonal
1311	Agricultural and Forestry Production Managers	inspecting plantations and fields to determine maturity dates of crops, or to estimate potential damage from weather	Routine cognitive
1311	Agricultural and Forestry Production Managers	overseeing the selection, training and performance of agricultural and forestry workers and contractors	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(a) monitoring aquaculture and fishery market activity and planning production and fishing activities to meet contract requirements and market demand;	Non-routine analytical
1312	Aquaculture and Fisheries Production Managers	(b) establishing and managing budgets, monitoring production output and costs, recording information such as fisheries management practices, and preparing financial and operational reports;	Non-routine analytical
1312	Aquaculture and Fisheries Production Managers	(c) conferring with buyers to arrange for the sale of produce and catches;	Routine cognitive
1312	Aquaculture and Fisheries Production Managers	(d) contracting with fishing skippers or owners of vessels and aquaculture farms for fishing and aquaculture operations, or for management of production;	Non-routine interpersonal

1312	Aquaculture and Fisheries Production Managers	(e) conducting and organizing aquaculture or fishery stock examinations in order to identify diseases or parasites;	Non-routine analytical
1312	Aquaculture and Fisheries Production Managers	(f) devising and coordinating activities to improve fish hatching and growth rates, and to prevent disease in hatcheries;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(g) monitoring environments to maintain or improve conditions for aquatic life;	Non-routine analytical
1312	Aquaculture and Fisheries Production Managers	(h) directing and monitoring trapping and spawning of fish, egg incubation and fry rearing, applying knowledge of management and fish culturing techniques;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(i) coordinating the selection and maintenance of brood stock;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(j) directing and monitoring the transfer of mature fish to lakes, ponds, streams or commercial tanks;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	purchasing machinery, equipment and supplies such as vessels and nets;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(l) organizing operations such as maintenance of ships, boats and equipment;	Non-routine interpersonal
1312	Aquaculture and Fisheries Production Managers	(m) overseeing the selection, training and performance of aquaculture or fishery workers and contractors.	Non-routine interpersonal
1322	Mining Managers	(a) conferring with other managers to set production quotas, plan extraction sites and develop policies for the removal of raw materials;	Non-routine analytical

1322	Mining Managers	(b) evaluating efficiency of production sites to determine adequacy of personnel, equipment and technologies used, and make changes to work schedules or equipment when necessary;	Non-routine analytical
1322	Mining Managers	(c) planning details of production activities in terms of output quality and quantity, cost, time available and labour requirements;	Non-routine analytical
1322	Mining Managers	(d) controlling the operation of plant and quality procedures through planning of maintenance, designation of operating hours and supply of equipment;	Non-routine analytical
1322	Mining Managers	(e) establishing and managing budgets, monitoring production output and costs, and adjusting processes and resources to minimize costs;	Non-routine analytical
1322	Mining Managers	(f) overseeing the acquisition and installation of new plant and equipment;	Non-routine interpersonal
1322	Mining Managers	(g) controlling the preparation of production records and reports;	Non-routine interpersonal
1322	Mining Managers	(h) coordinating the implementation of health and safety requirements;	Non-routine interpersonal
1322	Mining Managers	(i) researching and implementing regulatory and statutory requirements affecting mineral extraction operations and the environment;	Non-routine analytical
1322	Mining Managers	(j) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1323	Construction Managers	(a) interpreting architectural drawings and specifications;	Non-routine analytical
1323	Construction Managers	(b) coordinating labour resources and procurement	Non-routine interpersonal

		and delivery of materials, plant and equipment;	
1323	Construction Managers	(c) negotiating with building owners, property developers and subcontractors involved in the construction process to ensure projects are completed on time and within budget;	Non-routine interpersonal
1323	Construction Managers	(d) preparing tenders and contract bids;	Routine cognitive
1323	Construction Managers	(e) operating and implementing coordinated work programmes for sites;	Non-routine analytical
1323	Construction Managers	(f) ensuring adherence to building legislation and standards of performance, quality, cost and safety;	Routine cognitive
1323	Construction Managers	(g) arranging submission of plans to local authorities;	Non-routine interpersonal
1323	Construction Managers	(h) building under contract, or subcontracting specialized building services;	Non-routine interpersonal
1323	Construction Managers	(i) arranging building inspections by relevant authorities;	Non-routine interpersonal
1323	Construction Managers	(j) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1323	Construction Managers	(k) overseeing the selection, training and performance of staff and subcontractors.	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(a) determining, implementing and monitoring purchasing, storage and distribution strategies, policies and plans;	Non-routine analytical
1324	Supply, Distribution and Related Managers	(b) preparing and implementing plans to maintain required stock levels at minimum cost;	Non-routine analytical



1324	Supply, Distribution and Related Managers	(c) negotiating contracts with suppliers to meet quality, cost and delivery requirements;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(d) monitoring and reviewing storage and inventory systems to meet supply requirements, and control stock levels;	Non-routine analytical
1324	Supply, Distribution and Related Managers	(e) overseeing the dispatch of road vehicles, trains, vessels or aircraft;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(f) operating recording systems to track all movements of goods, and ensuring reordering and restocking at optimal times;	Non-routine analytical
1324	Supply, Distribution and Related Managers	(g) liaising with other departments and customers concerning requirements for outward goods and associated forwarding transportation;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(h) overseeing the recording of purchase, storage and distribution transactions;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(i) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1324	Supply, Distribution and Related Managers	(j) establishing and directing operational and administrative procedures;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(k) planning and directing daily operations;	Non-routine interpersonal
1324	Supply, Distribution and Related Managers	(l) overseeing the selection, training and performance of staff.	Non-routine interpersonal

1330	Information and Communications Technology Services Managers	(a) consulting with users, management, vendors and technicians to assess computing needs and system requirements, and specifying technology to meet those needs;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(b) formulating and directing information and communication technology (ICT) strategies, policies and plans;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(c) directing the selection and installation of ICT resources and the provision of user training;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(d) directing ICT operations, analysing workflow, establishing priorities, developing standards and setting deadlines;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(e) overseeing the security of ICT systems;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(f) assigning, reviewing, managing and leading the work of systems analysts, programmers and other computer-related workers;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(g) evaluating the organization's technology use and needs and recommending improvements such as hardware and software upgrades;	Non-routine analytical

1330	Information and Communications Technology Services Managers	(h) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1330	Information and Communications Technology Services Managers	(i) establishing and directing operational and administrative procedures;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(j) overseeing the selection, training and performance of staff;	Non-routine interpersonal
1330	Information and Communications Technology Services Managers	(k) representing the enterprise or organization at ICT-related conventions, seminars and conferences.	Non-routine interpersonal
1341	Child Care Services Managers	(a) developing and implementing programmes to enhance the physical, social, emotional and intellectual development of young children;	Non-routine analytical
1341	Child Care Services Managers	(b) establishing and monitoring budgets and determining allocation of funds for staff, supplies, materials, equipment and maintenance;	Non-routine analytical
1341	Child Care Services Managers	(c) overseeing and coordinating the provision of care for children in before-school, after-school, day and vacation care centres;	Non-routine interpersonal
1341	Child Care Services Managers	(d) directing and supervising child carers in providing care and supervision for young children;	Non-routine interpersonal

1341	Child Care Services Managers	(e) 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;	Routine cognitive
1341	Child Care Services Managers	(f) reviewing and interpreting government codes, and developing procedures to meet codes (e.g. concerning safety and security);	Non-routine analytical
1341	Child Care Services Managers	(g) monitoring children's progress and conferring with parents or guardians;	Non-routine analytical
1341	Child Care Services Managers	(h) preparing and maintaining records and accounts for a child care centre;	Routine cognitive
1341	Child Care Services Managers	(i) recruiting and evaluating staff and coordinating their professional development.	Non-routine interpersonal
1345	Education Managers	(a) determining educational programmes based on frameworks established by education authorities and governing bodies;	Non-routine analytical
1345	Education Managers	(b) implementing systems and procedures to monitor school performance and student enrolments;	Non-routine analytical
1345	Education Managers	(c) directing administrative and clerical activities concerning student admissions and educational services;	Non-routine interpersonal
1345	Education Managers	(d) controlling administrative operations such as budget planning, report preparation, and expenditure on supplies, equipment and services;	Non-routine interpersonal
1345	Education Managers	(e) providing leadership and guidance to teaching, academic and administrative staff as well as to students;	Non-routine interpersonal

1345	Education Managers	(f) evaluating the work of teachers and lecturers by visiting classrooms, observing teaching methods, reviewing instructional objectives and examining learning materials;	Non-routine analytical
1345	Education Managers	(g) promoting the educational programme, and representing the service or institution in the wider community;	Non-routine interpersonal
1345	Education Managers	(h) supervising the maintenance of educational facilities;	Non-routine interpersonal
1345	Education Managers	(i) developing and enforcing a disciplinary code to create a safe and conducive environment for students and teachers;	Non-routine analytical
1345	Education Managers	(j) organizing and implementing methods of raising additional funds in conjunction with parent and community groups and sponsors;	Non-routine interpersonal
1345	Education Managers	(k) controlling selection, training and supervision of staff.	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(a) planning, directing and coordinating the activities of staff in the branch;	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(b) establishing and maintaining relationships with individual and business customers;	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(c) providing advice and assistance to customers on their financial and insurance needs and on matters such as changes in law that may affect customers;	Non-routine analytical
1346	Financial and Insurance Services Branch Managers	(d) examining, evaluating and processing loan and insurance applications;	Non-routine analytical

1346	Financial and Insurance Services Branch Managers	(e) monitoring credit extension decisions;	Non-routine analytical
1346	Financial and Insurance Services Branch Managers	(f) conducting financial investigations;	Non-routine analytical
1346	Financial and Insurance Services Branch Managers	(g) overseeing the flow of cash and financial instruments, and the preparation of financial and regulatory reports;	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(h) approving or rejecting, or coordinating the approval or rejection of, lines of credit for commercial, real estate and personal loans;	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(i) coordinating cooperation with other branches of the company;	Non-routine interpersonal
1346	Financial and Insurance Services Branch Managers	(j) managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1346	Financial and Insurance Services Branch Managers	(k) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1349	Professional Services Managers Not Elsewhere Classified	(a) providing overall direction and management for a service, facility, organization or centre;	Non-routine interpersonal
1349	Professional Services Managers Not Elsewhere Classified	(b) developing, implementing and monitoring procedures, policies and standards for staff;	Non-routine analytical
1349	Professional Services Managers Not Elsewhere Classified	(c) directing, supervising and evaluating the work activities of professional, technical, clerical, service, maintenance and other personnel;	Non-routine interpersonal

1349	Professional Services Managers Not Elsewhere Classified	(d) monitoring and evaluating resources devoted to the provision of services;	Non-routine analytical
1349	Professional Services Managers Not Elsewhere Classified	(e) controlling administrative operations such as budget planning, report preparation, and expenditure on supplies, equipment and services;	Non-routine interpersonal
1349	Professional Services Managers Not Elsewhere Classified	(f) planning, directing and coordinating the provision of services;	Non-routine interpersonal
1349	Professional Services Managers Not Elsewhere Classified	(g) coordinating cooperation with other service provision agencies in the same or related fields;	Non-routine interpersonal
1349	Professional Services Managers Not Elsewhere Classified	(h) managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1349	Professional Services Managers Not Elsewhere Classified	(i) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1412	Restaurant Managers	planning menus in consultation with chefs and cooks;	Non-routine analytical
1412	Restaurant Managers	planning and organizing special functions;	Non-routine interpersonal
1412	Restaurant Managers	arranging the purchasing and pricing of goods according to budget;	Routine cognitive
1412	Restaurant Managers	maintaining records of stock levels and financial transactions;	Routine cognitive

1412	Restaurant Managers	ensuring that dining, kitchen and food storage facilities comply with health regulations and are clean, functional and of suitable appearance;	Routine cognitive
1412	Restaurant Managers	conferring with customers to assess their satisfaction with meals and service;	Non-routine interpersonal
1412	Restaurant Managers	selecting staff, setting staff work schedules, and training and supervising waiting and kitchen staff;	Non-routine interpersonal
1412	Restaurant Managers	taking reservations, greeting guests and assisting in taking orders;	Non-routine interpersonal
1412	Restaurant Managers	negotiating arrangements with clients and suppliers;	Non-routine interpersonal
1412	Restaurant Managers	ensuring compliance with occupational health and safety regulations.	Routine cognitive
1420	Retail and Wholesale Trade Managers	(a) determining product mix, stock levels and service standards;	Non-routine analytical
1420	Retail and Wholesale Trade Managers	(b) formulating and implementing purchasing and marketing policies, and setting prices;	Non-routine analytical
1420	Retail and Wholesale Trade Managers	(c) promoting and advertising the establishment's goods and services;	Non-routine interpersonal
1420	Retail and Wholesale Trade Managers	(d) maintaining records of stock levels and financial transactions;	Routine cognitive
1420	Retail and Wholesale Trade Managers	(e) undertaking budgeting for the establishment;	Non-routine analytical
1420	Retail and Wholesale Trade Managers	(f) controlling selection, training and supervision of staff;	Non-routine interpersonal



1420	Retail and Wholesale Trade Managers	(g) ensuring compliance with occupational health and safety regulations.	Routine cognitive
1431	Sports, Recreation and Cultural Centre Managers	(a) planning and organizing the range and mix of entertainment, attractions, cultural activities and sports and fitness programmes to be offered by the centre;	Routine cognitive
1431	Sports, Recreation and Cultural Centre Managers	(b) ensuring that facilities are kept clean and in good condition;	Routine cognitive
1431	Sports, Recreation and Cultural Centre Managers	(c) keeping abreast of new trends and developments in the creative arts and arranging theatrical productions and performances by bands and orchestras;	Non-routine analytical
1431	Sports, Recreation and Cultural Centre Managers	(d) advising on the facilities available and promoting publicity in relation to events, shows and activities;	Non-routine analytical
1431	Sports, Recreation and Cultural Centre Managers	(e) checking and keeping custody of all cash receipts and making regular stock checks;	Routine cognitive
1431	Sports, Recreation and Cultural Centre Managers	(f) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1431	Sports, Recreation and Cultural Centre Managers	(g) planning and directing daily operations;	Non-routine interpersonal
1431	Sports, Recreation and Cultural Centre Managers	(h) controlling the selection, supervision and performance of staff;	Non-routine interpersonal
1431	Sports, Recreation and Cultural Centre Managers	(i) ensuring compliance with health and safety regulations.	Routine cognitive

1439	Services Managers Not Elsewhere Classified	cannot be determined	#N/A
2132	Farming, Forestry and Fisheries Advisers	(a) collecting and analysing data and samples related to produce, feed, soil, water quality and other factors affecting farm, forest or fishery production;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(b) advising on techniques for improving the production of crops, livestock and fish, and alternative production options;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(c) advising on livestock and crop disease, control of pests and weeds, soil improvement, animal husbandry and feeding programmes;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(d) studying the environmental factors affecting commercial crop production, pasture growth, animal breeding, fish stocks and the growth and health of forest trees;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(e) studying the effects of cultivation techniques, soils, insects, diseases and fisheries practices on animal, crop, forestry and fisheries yield;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(f) studying fish migration, growth, feeding and spawning, and devising methods of collecting, fertilizing, incubating and hatching fish eggs;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(g) researching into characteristics, use capability and productivity of soils, and applying findings to development of improved agricultural, horticultural and forestry practices;	Non-routine analytical

2132	Farming, Forestry and Fisheries Advisers	(h) developing procedures and techniques for solving agricultural problems and improving the efficiency of production;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(i) managing forest and fisheries resources to maximize their long-term commercial, recreational and environmental benefits;	Non-routine interpersonal
2132	Farming, Forestry and Fisheries Advisers	(j) studying the propagation and culture of forest trees, methods for improving the growth of stock, and the effects of thinning on forest yields;	Non-routine analytical
2132	Farming, Forestry and Fisheries Advisers	(k) investigating, planning and implementing management procedures to cope with the effects of fires, floods, droughts, soil erosion, pests and diseases;	Non-routine interpersonal
2132	Farming, Forestry and Fisheries Advisers	(l) preparing scientific reports and conducting advisory information sessions and lectures for farming, forestry and fishing communities and other groups.	Non-routine interpersonal
2141	Industrial and Production Engineers	(a) studying functional statements, organizational charts and project information to determine functions and responsibilities of workers and work units and to identify areas of duplication;	Non-routine analytical
2141	Industrial and Production Engineers	(b) establishing work measurement programmes and analysing work samples to develop standards for labour utilization;	Non-routine analytical
2141	Industrial and Production Engineers	(c) analysing workforce utilization, facility layout, operational data and production schedules and costs to determine optimum worker and equipment efficiencies;	Non-routine analytical

2141	Industrial and Production Engineers	(d) developing specifications for manufacture, and determining materials, equipment, piping, material flows, capacities and layout of plant and systems;	Non-routine analytical
2141	Industrial and Production Engineers	(e) organizing and managing project labour and the delivery of materials, plant and equipment;	Non-routine interpersonal
2141	Industrial and Production Engineers	(f) establishing standards and policies for installation, modification, quality control, testing, inspection and maintenance according to engineering principles and safety regulations;	Non-routine analytical
2141	Industrial and Production Engineers	(g) inspecting plant to improve and maintain performance;	Routine cognitive
2141	Industrial and Production Engineers	(h) directing the maintenance of plant buildings and equipment, and coordinating the requirements for new designs, surveys and maintenance schedules;	Non-routine interpersonal
2141	Industrial and Production Engineers	(i) advising management on new production methods, techniques and equipment;	Non-routine analytical
2141	Industrial and Production Engineers	(j) liaising with materials buying, storing and controlling departments to ensure a steady flow of supplies.	Routine cognitive
2142	Civil Engineers	(a) conducting research and developing new or improved theories and methods related to civil engineering;	Non-routine analytical
2142	Civil Engineers	(b) 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;	Non-routine analytical

2142	Civil Engineers	(c) determining and specifying construction methods, materials and quality standards, and directing construction work;	Non-routine analytical
2142	Civil Engineers	(d) establishing control systems to ensure efficient functioning of structures as well as safety and environmental protection;	Non-routine analytical
2142	Civil Engineers	(e) organizing and directing maintenance and repair of existing civil engineering structures;	Non-routine interpersonal
2142	Civil Engineers	(f) analysing the behaviour of soil and rock when placed under pressure by proposed structures and designing structural foundations;	Non-routine analytical
2142	Civil Engineers	(g) analysing the stability of structures and testing the behaviour and durability of materials used in their construction.	Non-routine analytical
2144	Mechanical Engineers	(a) advising on and designing machinery and tools for manufacturing, mining, construction, agricultural, and other industrial purposes;	Non-routine analytical
2144	Mechanical Engineers	(b) 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;	Non-routine analytical
2144	Mechanical Engineers	(c) advising on and designing: hulls, superstructures and propulsion systems of ships; mechanical plant and equipment for the release, control and utilization of energy; heating, ventilation and refrigeration systems,	Non-routine analytical

		steering gear, pumps, and other mechanical equipment;	
2144	Mechanical Engineers	(d) 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;	Non-routine analytical
2144	Mechanical Engineers	(e) advising on and designing non-electrical parts of apparatus or products such as word processors, computers, precision instruments, cameras and projectors;	Non-routine analytical
2144	Mechanical Engineers	(f) establishing control standards and procedures to ensure efficient functioning and safety of machines, machinery, tools, motors, engines, industrial plant, equipment or systems;	Non-routine analytical
2144	Mechanical Engineers	(g) ensuring that equipment, operation and maintenance comply with design specifications and safety standards.	Routine cognitive
2149	Engineering Professionals Not Elsewhere Classified	(a) applying knowledge of engineering to the design, development and evaluation of biological and health systems and products such as artificial organs, prostheses, and instrumentation;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(b) designing devices used in various medical procedures and imaging systems such as magnetic resonance imaging, and devices for automating	Non-routine analytical

		insulin injections or controlling body functions;	
2149	Engineering Professionals Not Elsewhere Classified	(c) designing components of optical instruments such as lenses, microscopes, telescopes, lasers, optical disc systems and other equipment that utilize the properties of light;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(d) designing, testing, and coordinating the development of explosive ordnance material to meet military procurement specifications;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(e) designing and overseeing the construction and operation of nuclear reactors and power plants and nuclear fuels reprocessing and reclamation systems;	Non-routine interpersonal
2149	Engineering Professionals Not Elsewhere Classified	(f) designing and developing nuclear equipment such as reactor cores, radiation shielding and associated instrumentation and control mechanisms;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(g) assessing damage and providing calculations for marine salvage operations;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(h) studying and advising on engineering aspects of particular manufacturing processes, such as those related to glass, ceramics, textiles, leather products, wood and printing;	Non-routine analytical
2149	Engineering Professionals Not Elsewhere Classified	(i) identifying potential hazards and introducing safety procedures and devices.	Non-routine analytical

2151	Electrical Engineers	(a) advising on and designing power stations and systems which generate, transmit and distribute electrical power;	Non-routine analytical
2151	Electrical Engineers	(b) supervising, controlling and monitoring the operation of electrical generation, transmission and distribution systems;	Non-routine interpersonal
2151	Electrical Engineers	(c) advising on and designing systems for electrical motors, electrical traction and other equipment, or electrical domestic appliances;	Non-routine analytical
2151	Electrical Engineers	(d) specifying electrical installation and application in industrial and other buildings and objects;	Non-routine analytical
2151	Electrical Engineers	(e) establishing control standards and procedures to monitor performance and safety of electrical generating and distribution systems, motors and equipment;	Non-routine analytical
2151	Electrical Engineers	(f) determining manufacturing methods for electrical systems, as well as maintenance and repair of existing electrical systems, motors and equipment.	Non-routine analytical
2161	Building Architects	(a) developing new or improved architectural theories and methods;	Non-routine analytical
2161	Building Architects	(b) inspecting sites and consulting clients, management and other stakeholders to determine type, style and size of proposed buildings and alterations to existing buildings;	Routine cognitive
2161	Building Architects	(c) providing information regarding designs, materials and estimated building times;	Non-routine analytical



2161	Building Architects	(d) preparing project documentation, including sketches and scale drawings, and integrating structural, mechanical and aesthetic elements in final designs;	Non-routine analytical
2161	Building Architects	(e) writing specifications and contract documents for use by builders and calling tenders on behalf of clients;	Routine cognitive
2161	Building Architects	(f) making necessary contacts to ensure feasibility of projects regarding style, cost, timing and compliance with regulations;	Non-routine interpersonal
2161	Building Architects	(g) identifying and finding best solutions for problems regarding function and quality of interior environments of buildings and making necessary designs, drawings and plans;	Non-routine analytical
2161	Building Architects	(h) monitoring construction or rehabilitation work to ensure compliance with specifications and quality standards;	Routine cognitive
2161	Building Architects	(i) maintaining technical liaison and consultancy with other relevant specialists.	Non-routine interpersonal
2162	Landscape Architects	(a) developing new or improved theories and methods and providing advice on policy related to landscape architecture;	Non-routine analytical
2162	Landscape Architects	(b) inspecting sites and consulting clients, management and other stakeholders to determine type, style and size of proposed buildings, parks, roads and other open spaces;	Routine cognitive

2162	Landscape Architects	(c) 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, feasibility studies and environmental impact statements;	Non-routine analytical
2162	Landscape Architects	(d) preparing reports, strategic plans, site plans, working drawings, specifications and cost estimates for land development, showing location and details of proposals, including ground modelling, structures, vegetation and access;	Non-routine analytical
2162	Landscape Architects	(e) writing specifications and contract documents for use by builders and civil engineering contractors and calling tenders on behalf of clients;	Routine cognitive
2162	Landscape Architects	(f) making necessary contacts to ensure feasibility of projects regarding style, cost, timing and compliance with regulations;	Non-routine interpersonal
2162	Landscape Architects	(g) identifying and finding best solutions for problems regarding function and quality of exterior environments and making necessary designs, drawings and plans;	Non-routine analytical
2162	Landscape Architects	(h) monitoring construction or rehabilitation work to ensure compliance with specifications and quality standards;	Routine cognitive
2162	Landscape Architects	(i) maintaining technical liaison and consultancy with other relevant specialists.	Non-routine interpersonal

2163	Product and Garment Designers	determining the objectives and constraints of the design brief by consulting with clients and stakeholders;	Non-routine analytical
2163	Product and Garment Designers	formulating design concepts for clothing, textiles, industrial, commercial and consumer products, and jewellery;	Non-routine analytical
2163	Product and Garment Designers	harmonizing aesthetic considerations with technical, functional, ecological and production requirements;	Non-routine analytical
2163	Product and Garment Designers	preparing sketches, diagrams, illustrations, plans, samples and models to communicate design concepts;	Non-routine analytical
2163	Product and Garment Designers	negotiating design solutions with clients, management, and sales and manufacturing staff;	Non-routine analytical
2163	Product and Garment Designers	selecting, specifying and recommending functional and aesthetic materials, production methods and finishes for manufacture;	Non-routine analytical
2163	Product and Garment Designers	detailing and documenting the selected design for production;	Non-routine analytical
2163	Product and Garment Designers	preparing and commissioning prototypes and samples;	Non-routine analytical
2163	Product and Garment Designers	supervising the preparation of patterns, programmes and tooling, and of the manufacturing process.	Non-routine interpersonal
2165	Cartographers and Surveyors	(a) surveying, measuring and describing land surfaces, mines, underground surfaces, sea, river and lake beds;	Routine cognitive
2165	Cartographers and Surveyors	(b) noting exact position of various features and recording survey data in digital form;	Non-routine analytical

2165	Cartographers and Surveyors	(c) making charts and maps to be used in determining navigable waters and channels and in planning construction of marine structures;	Non-routine analytical
2165	Cartographers and Surveyors	(d) planning and conducting aerial photographic surveys;	Non-routine analytical
2165	Cartographers and Surveyors	(e) 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;	Non-routine analytical
2165	Cartographers and Surveyors	(f) undertaking research and development of surveying and photogrammetric measurement systems, cadastral systems and land information systems;	Non-routine analytical
2165	Cartographers and Surveyors	(g) studying and advising on technical, aesthetic and economic aspects of map production;	Non-routine analytical
2165	Cartographers and Surveyors	(h) maintaining technical liaison and consultancy with other relevant specialists.	Non-routine interpersonal
2166	Graphic and Multimedia Designers	determining the objectives and constraints of the design brief by consulting with clients and stakeholders;	Non-routine analytical
2166	Graphic and Multimedia Designers	undertaking research and analysing functional communication requirements;	Non-routine analytical
2166	Graphic and Multimedia Designers	formulating design concepts for the subject to be communicated;	Non-routine analytical
2166	Graphic and Multimedia Designers	preparing sketches, diagrams, illustrations and layouts to communicate design concepts;	Non-routine analytical
2166	Graphic and Multimedia Designers	designing complex graphics and animation to satisfy functional, aesthetic and creative requirements of the design brief;	Non-routine analytical

2166	Graphic and Multimedia Designers	creating two-dimensional and three-dimensional images depicting objects in motion or illustrating a process, using computer animation or modelling programmes;	Non-routine analytical
2166	Graphic and Multimedia Designers	negotiating design solutions with clients, management, sales and production staff;	Non-routine analytical
2166	Graphic and Multimedia Designers	selecting, specifying or recommending functional and aesthetic materials and media for publication, delivery or display;	Non-routine analytical
2166	Graphic and Multimedia Designers	detailing and documenting the selected design for production;	Non-routine analytical
2166	Graphic and Multimedia Designers	supervising or carrying out production in the chosen media.	Non-routine interpersonal
2221	Nursing Professionals	(a) planning, providing and evaluating nursing care for patients according to the practice and standards of modern nursing;	Routine cognitive
2221	Nursing Professionals	(b) coordinating the care of patients in consultation with other health professionals and members of health teams;	Non-routine interpersonal
2221	Nursing Professionals	(c) developing and implementing care plans for the biological, social and psychological treatment of patients in collaboration with other health professionals;	Non-routine analytical
2221	Nursing Professionals	(d) planning and providing personal care, treatments and therapies including administering medications, and monitoring responses to treatment or care plan;	Routine cognitive
2221	Nursing Professionals	(e) cleaning wounds and applying surgical dressings and bandages;	Non-routine manual physical

2221	Nursing Professionals	(f) monitoring pain and discomfort experienced by patients and alleviating pain using a variety of therapies, including the use of painkilling drugs;	Routine cognitive
2221	Nursing Professionals	(g) planning and participating in health education programmes, health promotion and nurse education activities in clinical and community settings;	Non-routine analytical
2221	Nursing Professionals	(h) answering questions from patients and families and providing information about prevention of ill-health, treatment and care;	Routine cognitive
2221	Nursing Professionals	(i) supervising and coordinating the work of other nursing, health and personal care workers;	Non-routine interpersonal
2221	Nursing Professionals	(j) conducting research on nursing practices and procedures and disseminating findings such as through scientific papers and reports.	Non-routine analytical
2222	Midwifery Professionals	(a) planning, providing and evaluating care and support services for women and babies before, during and after pregnancy and childbirth according to the practice and standards of modern midwifery care;	Routine cognitive
2222	Midwifery Professionals	(b) providing advice to women and families and conducting community education on health, nutrition, hygiene, exercise, birth and emergency plans, breastfeeding, infant care, family planning and contraception, lifestyle and other topics related to pregnancy and childbirth;	Non-routine analytical

2222	Midwifery Professionals	(c) assessing progress during pregnancy and childbirth, managing complications and recognizing warning signs requiring referral to a medical doctor with specialized skills in obstetrics;	Routine cognitive
2222	Midwifery Professionals	(d) monitoring the health status of newborns, managing complications and recognizing warning signs requiring referral to a medical doctor with specialized skills in neonatology;	Routine cognitive
2222	Midwifery Professionals	(e) monitoring pain and discomfort experienced by women during labour and delivery and alleviating pain using a variety of therapies, including the use of painkilling drugs;	Routine cognitive
2222	Midwifery Professionals	(f) reporting births to government authorities to meet legal and professional requirements;	Routine cognitive
2222	Midwifery Professionals	(g) conducting research on midwifery practices and procedures and disseminating findings such as through scientific papers and reports;	Non-routine analytical
2222	Midwifery Professionals	(h) planning and conducting midwifery education activities in clinical and community settings.	Non-routine interpersonal
2230	Traditional and Complementary Medicine Professionals	(a) conducting physical examinations of patients and interviewing them and their families to determine their health status;	Non-routine interpersonal
2230	Traditional and Complementary Medicine Professionals	(b) developing and implementing treatment plans for physical, mental and psychosocial ailments using applications such as acupuncture, ayurvedic,	Non-routine analytical

		homeopathic and herbal medicine;	
2230	Traditional and Complementary Medicine Professionals	(c) evaluating and documenting patients' progress through treatment plans;	Routine cognitive
2230	Traditional and Complementary Medicine Professionals	(d) providing health, nutrition and lifestyle advice to individuals, families and communities;	Non-routine interpersonal
2230	Traditional and Complementary Medicine Professionals	(e) prescribing and preparing traditional medicines, such as herbal, plant, mineral and animal extracts, to stimulate the body's capacity for self-healing;	Routine cognitive
2230	Traditional and Complementary Medicine Professionals	(f) exchanging information about patients with other health care workers as needed to ensure continuing and comprehensive health care;	Non-routine interpersonal
2230	Traditional and Complementary Medicine Professionals	(g) conducting research into traditional and complementary medicines and treatments and disseminating findings such as through scientific papers and reports.	Non-routine analytical
2262	Pharmacists	(a) receiving prescriptions for medicinal products from medical doctors and other health professionals, checking patients' medicine histories, and ensuring proper dosage and methods of administration and drug compatibility before dispensing;	Routine cognitive
2262	Pharmacists	(b) preparing or supervising the preparation and labelling of liquid medicines, ointments, powders, tablets and other medications to fill prescriptions;	Non-routine interpersonal



2262	Pharmacists	(c) providing information and advice to prescribers and clients regarding drug interactions, incompatibility and contraindications, side effects, dosage and proper medication storage;	Non-routine analytical
2262	Pharmacists	(d) collaborating with other health care 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;	Non-routine analytical
2262	Pharmacists	(e) maintaining prescription files and recording the issue of narcotics, poisons and habit-forming drugs in accordance with legal and professional requirements;	Routine cognitive
2262	Pharmacists	(f) storing and preserving vaccines, serums and other drugs subject to deterioration;	Routine cognitive
2262	Pharmacists	(g) advising clients on and supplying non-prescription medicines and diagnostic and therapeutic aids for common conditions;	Non-routine analytical
2262	Pharmacists	(h) supervising and coordinating the work of pharmacy technicians, pharmacy interns and pharmacy sales assistants;	Non-routine interpersonal
2262	Pharmacists	(i) conducting research to develop and improve pharmaceuticals, cosmetics and related chemical products;	Non-routine analytical
2262	Pharmacists	(j) conferring with chemists, engineering professionals and other professionals about manufacturing techniques and ingredients;	Non-routine interpersonal

2262	Pharmacists	(k) testing and analysing drugs to determine their identity, purity and strength in relation to specified standards;	Non-routine analytical
2262	Pharmacists	(l) evaluating labels, packaging and advertising of drug products;	Routine cognitive
2262	Pharmacists	(m) developing information and risks of particular drugs.	Non-routine analytical
2264	Physiotherapists	(a) administering muscle, nerve, joint functional ability and other tests to identify and assess physical problems of patients;	Routine cognitive
2264	Physiotherapists	(b) establishing treatment goals with patients and designing treatment programmes to reduce physical pain, strengthen muscles, improve cardiothoracic, cardiovascular and respiratory functions, restore joint mobility and improve balance and coordination;	Non-routine analytical
2264	Physiotherapists	(c) developing, implementing and monitoring programmes and treatments using the therapeutic properties of exercise, heat, cold, massage, manipulation, hydrotherapy, electrotherapy, ultraviolet and infra-red light and ultrasound in the treatment of patients;	Non-routine analytical
2264	Physiotherapists	(d) instructing patients and their families in procedures to be continued outside clinical settings;	Non-routine interpersonal
2264	Physiotherapists	(e) 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	Routine cognitive

		ensure continuing and comprehensive care;	
2264	Physiotherapists	(f) developing and implementing programmes for screening and prevention of common physical ailments and disorders;	Non-routine analytical
2264	Physiotherapists	(g) supervising the work of physiotherapy assistants and others.	Non-routine interpersonal
2310	University and Higher Education Teachers	(a) designing and modifying curricula and preparing courses of study in accordance with requirements;	Non-routine analytical
2310	University and Higher Education Teachers	(b) preparing and delivering lectures and conducting tutorials, seminars and laboratory experiments;	Non-routine interpersonal
2310	University and Higher Education Teachers	(c) stimulating discussion and independent thought among students;	Non-routine interpersonal
2310	University and Higher Education Teachers	(d) supervising, where appropriate, experimental and practical work undertaken by students;	Non-routine interpersonal
2310	University and Higher Education Teachers	(e) administering, evaluating and marking examination papers and tests;	Routine cognitive
2310	University and Higher Education Teachers	(f) directing research of postgraduate students or other members of department;	Non-routine interpersonal
2310	University and Higher Education Teachers	(g) researching into and developing concepts, theories and operational methods for application in industrial and other fields;	Non-routine analytical

2310	University and Higher Education Teachers	(h) preparing scholarly books, papers or articles;	Non-routine analytical
2310	University and Higher Education Teachers	(i) participating in departmental and faculty meetings and in conferences and seminars.	Non-routine interpersonal
2320	Vocational Education Teachers	(a) developing curricula and planning course content and methods of instruction;	Non-routine analytical
2320	Vocational Education Teachers	(b) 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;	Non-routine analytical
2320	Vocational Education Teachers	(c) presenting lectures and conducting discussions to increase students' knowledge and competence;	Non-routine interpersonal
2320	Vocational Education Teachers	(d) instructing and monitoring students in the use of tools, equipment and materials and the prevention of injury and damage;	Non-routine interpersonal
2320	Vocational Education Teachers	(e) observing and evaluating students' work to determine progress, provide feedback and make suggestions for improvement;	Non-routine analytical
2320	Vocational Education Teachers	(f) administering oral, written or performance tests to measure progress, evaluate training effectiveness and assess competency;	Non-routine analytical
2320	Vocational Education Teachers	(g) preparing reports and maintaining records such as student grades, attendance rolls and training activity details;	Routine cognitive
2320	Vocational Education Teachers	(h) supervising independent or group projects, field placements, laboratory work or other training;	Non-routine interpersonal

2320	Vocational Education Teachers	(i) providing individualized instruction and tutorial or remedial instruction;	Non-routine interpersonal
2320	Vocational Education Teachers	(j) conducting on-the-job training sessions to teach and demonstrate principles, techniques, procedures or methods of designated subjects.	Non-routine interpersonal
2330	Secondary Education Teachers	(a) designing and modifying curricula and preparing educational courses of study in accordance with curriculum guidelines;	Non-routine analytical
2330	Secondary Education Teachers	(b) establishing and enforcing rules for behaviour and procedures for maintaining order among students;	Routine cognitive
2330	Secondary Education Teachers	(c) preparing and giving lessons, discussions, and demonstrations in one or more subjects;	Non-routine interpersonal
2330	Secondary Education Teachers	(d) establishing clear objectives for all lessons, units, and projects and communicating those objectives to students;	Non-routine analytical
2330	Secondary Education Teachers	(e) preparing materials and classrooms for class activities;	Non-routine manual physical
2330	Secondary Education Teachers	(f) adapting teaching methods and instructional materials to meet students' varying needs and interests;	Non-routine interpersonal
2330	Secondary Education Teachers	(g) observing and evaluating students' performance and behaviour;	Non-routine analytical
2330	Secondary Education Teachers	(h) preparing, administering and marking tests, assignments and examinations to evaluate pupils' progress;	Routine cognitive
2330	Secondary Education Teachers	(i) preparing reports about pupils' work and conferring with other teachers and parents;	Non-routine analytical

2330	Secondary Education Teachers	(j) participating in meetings concerning the school's educational or organizational policies;	Non-routine interpersonal
2330	Secondary Education Teachers	(k) planning, organizing and participating in school activities such as excursions, sporting events and concerts.	Non-routine interpersonal
2341	Primary School Teachers	(a) preparing daily and longer term lesson plans in accordance with curriculum guidelines;	Non-routine analytical
2341	Primary School Teachers	(b) instructing children individually and in groups, using various teaching methods and materials (e.g. computers, books, games), adapting to children's varying needs;	Non-routine interpersonal
2341	Primary School Teachers	(c) maintaining discipline and good working habits in the classroom;	Non-routine interpersonal
2341	Primary School Teachers	(d) planning and conducting activities with the children such as sporting activities, concerts and excursions;	Non-routine interpersonal
2341	Primary School Teachers	(e) assigning and grading class work and homework;	Routine cognitive
2341	Primary School Teachers	(f) preparing, administering and grading tests and assignments to evaluate children's progress;	Routine cognitive
2341	Primary School Teachers	(g) observing and evaluating children's performance and behaviour;	Non-routine analytical
2341	Primary School Teachers	(h) supervising children during classes and at other times in the school day, including the playground during breaks;	Non-routine interpersonal
2341	Primary School Teachers	(i) participating in staff meetings and other sessions, and conferring with other teachers concerning educational issues;	Non-routine interpersonal

2341	Primary School Teachers	(j) preparing for and attending parent meetings to discuss children's progress and problems.	Non-routine interpersonal
2342	Early Childhood Educators	(a) planning and organizing individual and group activities designed to facilitate the development of children's motor, cooperative and social skills, confidence and understanding;	Non-routine interpersonal
2342	Early Childhood Educators	(b) promoting language development through storytelling, role play, songs, rhymes and informal conversations and discussions;	Non-routine interpersonal
2342	Early Childhood Educators	(c) leading children in activities that provide opportunities for creative expression through the media of art, dramatic play, music and physical fitness;	Non-routine interpersonal
2342	Early Childhood Educators	(d) observing children in order to evaluate progress and to detect signs of developmental, emotional or health-related problems;	Non-routine analytical
2342	Early Childhood Educators	(e) observing and assessing nutritional health, welfare and safety needs of students and identifying factors which may impede students' progress;	Non-routine analytical
2342	Early Childhood Educators	(f) supervising children's activities to ensure safety and resolve conflicts;	Non-routine interpersonal
2342	Early Childhood Educators	(g) guiding and assisting children in the development of proper eating, dressing and toilet habits;	Non-routine interpersonal
2342	Early Childhood Educators	(h) discussing progress or problems of children with parents and other staff members and identifying appropriate actions and referrals to other services;	Non-routine interpersonal

2342	Early Childhood Educators	(i) establishing and maintaining collaborative relationships with other service providers working with young children.	Non-routine interpersonal
2351	Education Methods Specialists	researching into current developments in curricula, teaching methods and other educational practices, and advising on necessary changes and possible improvements;	Non-routine analytical
2351	Education Methods Specialists	evaluating and advising on contents of courses and methods of examination	Non-routine analytical
2351	Education Methods Specialists	researching into audiovisual and other teaching aids and advising on, planning and organizing their introduction in educational establishments;	Non-routine analytical
2351	Education Methods Specialists	documenting subjects and courses developed, and evaluating new courses;	Routine cognitive
2351	Education Methods Specialists	providing ongoing professional development, training and consultative services to teachers;	Non-routine interpersonal
2351	Education Methods Specialists	organizing and conducting workshops and conferences to train teachers in new programmes and methods;	Non-routine interpersonal
2351	Education Methods Specialists	developing the structure, content and objectives of new educational courses and programmes;	Non-routine analytical
2351	Education Methods Specialists	visiting schools periodically and conferring with administrative and teaching staff on questions relating to curricula, teaching methods, equipment and other matters;	Non-routine interpersonal
2351	Education Methods Specialists	visiting classrooms to observe teaching techniques and to evaluate teachers' performance and scholastic results obtained;	Non-routine analytical



2351	Education Methods Specialists	preparing reports and making recommendations to educational authorities concerning possible changes and improvements in curricula, teaching methods, and other matters.	Non-routine analytical
2352	Special Needs Teachers	(a) assessing students' abilities and limitations with regard to intellectual, physical, social and emotional impairments, exceptional intellectual gifts, or other special situations;	Non-routine analytical
2352	Special Needs Teachers	(b) designing or modifying curricula and preparing and delivering programmes, lessons and activities adapted to students' abilities and needs;	Non-routine analytical
2352	Special Needs Teachers	(c) giving instruction on an individual or group basis using special techniques or aids appropriate to students' needs;	Non-routine interpersonal
2352	Special Needs Teachers	(d) employing special educational strategies and techniques during instruction to improve the development of sensory- and perceptual-motor skills, language, cognition and memory;	Non-routine interpersonal
2352	Special Needs Teachers	(e) establishing and enforcing rules for behaviour and policies and procedures to maintain order among students;	Routine cognitive
2352	Special Needs Teachers	(f) teaching academic subjects and practical and self-help skills to students with hearing, sight and other impairments;	Non-routine interpersonal
2352	Special Needs Teachers	(g) stimulating and developing students' confidence, interests, abilities, manual skills and coordination;	Non-routine analytical

2352	Special Needs Teachers	(h) conferring with other staff members to plan and schedule lessons for special needs students;	Non-routine interpersonal
2352	Special Needs Teachers	(i) preparing and maintaining student data and other records and submitting reports;	Routine cognitive
2352	Special Needs Teachers	(j) administering various forms of assessment and evaluating progress of each student;	Routine cognitive
2352	Special Needs Teachers	(k) conferring with students, parents, head teachers and other relevant professionals involved in the students' care to develop individual educational plans designed to promote students' development.	Non-routine interpersonal
2353	Other Language Teachers	(a) assessing the level of ability and the extent of language difficulties of students, and establishing students' needs and learning goals;	Non-routine analytical
2353	Other Language Teachers	(b) planning, preparing and delivering lessons and workshops for groups and individuals, with content and rate of progression adapted to students' abilities and needs;	Non-routine analytical
2353	Other Language Teachers	(c) designing and producing teaching materials and adapting existing materials;	Non-routine analytical
2353	Other Language Teachers	(d) assessing students' progress;	Non-routine analytical
2353	Other Language Teachers	(e) assisting students in classroom settings where subjects are taught in a language other than the students' native language;	Non-routine interpersonal
2353	Other Language Teachers	(f) providing assistance to other teachers by designing special teaching programmes for students still learning the main language of instruction;	Non-routine analytical

2353	Other Language Teachers	(g) assigning and correcting work, and preparing and grading exams;	Routine cognitive
2353	Other Language Teachers	(h) assessing, recording and reporting on students' progress.	Routine cognitive
2354	Other Music Teachers	(a) assessing the students' level of ability and determining needs and learning goals;	Non-routine analytical
2354	Other Music Teachers	(b) planning, preparing and delivering programmes of study, lessons and workshops for individual students and groups;	Non-routine analytical
2354	Other Music Teachers	(c) preparing and presenting material on the theory and interpretation of music;	Non-routine analytical
2354	Other Music Teachers	(d) instructing and demonstrating practical aspects of singing or of playing a particular instrument;	Non-routine interpersonal
2354	Other Music Teachers	(e) teaching students to read and write musical notation;	Non-routine interpersonal
2354	Other Music Teachers	(f) assigning exercises and teaching pieces of music relevant to students' level of ability, interests and talents;	Routine cognitive
2354	Other Music Teachers	(g) assessing students and offering advice, criticism and encouragement;	Non-routine analytical
2354	Other Music Teachers	(h) revising curricula, course content, course materials and methods of instruction;	Non-routine analytical
2354	Other Music Teachers	(i) preparing students for examinations, performances and assessments;	Non-routine interpersonal
2354	Other Music Teachers	(j) arranging visits and tours to musical performances;	Non-routine interpersonal
2354	Other Music Teachers	(k) organizing and assisting in auditions or performances of students' work.	Non-routine interpersonal

2355	Other Arts Teachers	(a) assessing the students' level of ability and determining learning needs;	Non-routine analytical
2355	Other Arts Teachers	(b) planning, preparing and delivering programmes of study, lessons and workshops for individual students and groups;	Non-routine analytical
2355	Other Arts Teachers	(c) preparing and presenting material on the theory of the subject area being studied;	Non-routine interpersonal
2355	Other Arts Teachers	(d) instructing and demonstrating practical aspects of drama, dance, visual or other arts;	Non-routine interpersonal
2355	Other Arts Teachers	(e) assigning exercises and work relevant to students' level of ability, interests and talents;	Non-routine interpersonal
2355	Other Arts Teachers	(f) assessing students and offering advice, criticism and encouragement;	Non-routine analytical
2355	Other Arts Teachers	(g) revising curricula, course content, course materials and methods of instruction;	Non-routine analytical
2355	Other Arts Teachers	(h) preparing students for examinations, performance and assessments;	Non-routine interpersonal
2355	Other Arts Teachers	(i) arranging visits and tours to exhibitions and performances;	Non-routine interpersonal
2355	Other Arts Teachers	(j) organizing and assisting in performances or exhibitions of students' work.	Non-routine interpersonal
2356	Information Technology Trainers	identifying the information technology training needs and requirements of individual users and organizations;	Non-routine analytical
2356	Information Technology Trainers	preparing and developing instructional training material and aids such as handbooks, visual aids, online tutorials, demonstration models and supporting training reference documentation;	Non-routine analytical

2356	Information Technology Trainers	designing, coordinating, scheduling and conducting training and development programmes that can be delivered in the form of individual and group instruction, and facilitating workshop meetings, demonstrations and conferences;	Non-routine interpersonal
2356	Information Technology Trainers	monitoring and performing ongoing evaluation and assessment of training quality and effectiveness, and reviewing and modifying training objectives, methods and course deliverables;	Non-routine interpersonal
2356	Information Technology Trainers	gathering, investigating and researching background materials to gain a full understanding of the subject matter and systems;	Non-routine analytical
2356	Information Technology Trainers	keeping up to date with new product version releases, advances in software and general information technology trends, writing end user products and materials such as user training, tutorial and instruction manuals, online help, and operating and maintenance instructions.	Non-routine analytical
2359	Teaching Professionals Not Elsewhere Classified	(a) assessing students' level of ability and determining learning needs;	Non-routine analytical
2359	Teaching Professionals Not Elsewhere Classified	(b) planning, preparing and delivering programmes of study, lessons and workshops for individual students and groups;	Non-routine analytical
2359	Teaching Professionals Not Elsewhere Classified	(c) preparing and presenting material on the theory of the subject area being studied;	Non-routine interpersonal

2359	Teaching Professionals Not Elsewhere Classified	(d) instructing and demonstrating practical aspects of the subject area being studied;	Non-routine interpersonal
2359	Teaching Professionals Not Elsewhere Classified	(e) assigning exercises and work relevant to students' level of ability, interests and aptitude;	Non-routine interpersonal
2359	Teaching Professionals Not Elsewhere Classified	(f) assessing students and offering advice, criticism and encouragement;	Non-routine analytical
2359	Teaching Professionals Not Elsewhere Classified	(g) revising curricula, course content, course materials and methods of instruction;	Non-routine analytical
2359	Teaching Professionals Not Elsewhere Classified	(h) preparing students for examinations and assessments;	Non-routine interpersonal
2359	Teaching Professionals Not Elsewhere Classified	(i) counselling students regarding educational issues such as course and programme selection, class scheduling, school adjustment, truancy, study habits and career planning;	Non-routine interpersonal
2359	Teaching Professionals Not Elsewhere Classified	(j) counselling students to help them understand and overcome personal, social or behavioural problems affecting their education;	Non-routine interpersonal
2359	Teaching Professionals Not Elsewhere Classified	(k) preparing students for later educational experiences by encouraging them to explore learning opportunities and to persevere with challenging tasks.	Non-routine interpersonal
2411	Accountants	(a) advising on, planning and installing budgetary, accounts controlling and other accounting policies and systems;	Non-routine analytical

2411	Accountants	(b) preparing and certifying financial statements for presentation to management, shareholders and statutory or other bodies;	Non-routine analytical
2411	Accountants	(c) preparing tax returns, advising on taxation problems and contesting disputed claims before tax officials;	Non-routine analytical
2411	Accountants	(d) preparing or reporting on profit forecasts and budgets;	Routine cognitive
2411	Accountants	(e) conducting financial investigations in such matters as suspected fraud, insolvency and bankruptcy;	Non-routine analytical
2411	Accountants	(f) auditing accounts and bookkeeping records;	Non-routine analytical
2411	Accountants	(g) conducting investigations and advising management on financial aspects of productivity, stockholdings, sales, new products, etc.;	Non-routine analytical
2411	Accountants	(h) devising and controlling systems to determine unit cost of products and services.	Non-routine analytical
2413	Financial Analysts	(a) analysing financial information to produce forecasts of business, industry and economic conditions for use in making investment decisions;	Non-routine analytical
2413	Financial Analysts	(b) maintaining knowledge and staying abreast of developments in the fields of industrial technology, business, finance and economic theory;	Non-routine analytical
2413	Financial Analysts	(c) interpreting data affecting investment programmes such as price, yield, stability, future trends in investment risks and economic influences;	Non-routine analytical

2413	Financial Analysts	(d) monitoring economic, industrial and corporate developments through analysis of information obtained from financial publications and services, investment banking firms, government agencies, trade publications, company sources and personal interviews;	Non-routine analytical
2413	Financial Analysts	(e) recommending investments and investment timing to companies, investment firm staff or the investing public;	Non-routine analytical
2413	Financial Analysts	(f) determining the prices at which securities should be syndicated and offered to the public;	Non-routine analytical
2413	Financial Analysts	(g) preparing plans of action for investment based on financial analyses;	Non-routine analytical
2413	Financial Analysts	(h) evaluating and comparing the relative quality of various securities in a given industry;	Non-routine analytical
2413	Financial Analysts	(i) presenting oral and written reports on general economic trends, individual corporations and entire industries.	Routine cognitive
2422	Policy Administration Professionals	(a) liaising and consulting with programme administrators and other interested parties to identify policy needs;	Non-routine interpersonal
2422	Policy Administration Professionals	(b) reviewing existing policies and legislation to identify anomalies and out-of-date provisions;	Non-routine analytical
2422	Policy Administration Professionals	(c) researching social, economic and industrial trends, and client expectations of programmes and services provided;	Non-routine analytical



2422	Policy Administration Professionals	(d) formulating and analysing policy options, preparing briefing papers and recommendations for policy changes and advising on preferred options;	Non-routine analytical
2422	Policy Administration Professionals	(e) assessing impacts, financial implications, interactions with other programmes and political and administrative feasibility of policies;	Non-routine analytical
2422	Policy Administration Professionals	(f) conducting threat and risk assessments and developing responses;	Non-routine analytical
2422	Policy Administration Professionals	(g) reviewing operations and programmes to ensure consistency with policies of the organization.	Non-routine analytical
2423	Personnel and Careers Professionals	(a) advising on and performing personnel functions relating to employee recruitment, placement, training, promotion, compensation and employee–management relations or other areas of personnel policy;	Non-routine analytical
2423	Personnel and Careers Professionals	(b) 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;	Non-routine analytical
2423	Personnel and Careers Professionals	(c) preparing occupational information or working on occupational classification systems;	Routine cognitive

2423	Personnel and Careers Professionals	(d) advising and working on the foregoing and other aspects of job and occupational analysis in such fields as personnel administration, workforce research and planning, training or occupational information and vocational guidance;	Non-routine analytical
2423	Personnel and Careers Professionals	(e) studying and advising individuals on employment opportunities, career choices and further education or training that may be desirable.	Non-routine analytical
2431	Advertising and Marketing Professionals	(a) planning, developing and organizing advertising policies and campaigns to support sales objectives;	Non-routine analytical
2431	Advertising and Marketing Professionals	(b) advising managers and clients on strategies and campaigns to reach target markets, creating consumer awareness and effectively promoting the attributes of goods and services;	Non-routine analytical
2431	Advertising and Marketing Professionals	(c) writing advertising copy and media scripts, and arranging television and film production and media placement;	Non-routine analytical
2431	Advertising and Marketing Professionals	(d) collecting and analysing data regarding consumer patterns and preferences;	Non-routine analytical
2431	Advertising and Marketing Professionals	(e) interpreting and predicting current and future consumer trends;	Non-routine analytical
2431	Advertising and Marketing Professionals	(f) researching potential demand and market characteristics for new goods and services;	Non-routine analytical
2431	Advertising and Marketing Professionals	(g) supporting business growth and development through the preparation and execution of marketing objectives, policies and programmes;	Non-routine interpersonal

2431	Advertising and Marketing Professionals	(h) commissioning and undertaking market research to identify market opportunities for new and existing goods and services;	Non-routine analytical
2431	Advertising and Marketing Professionals	(i) advising on all elements of marketing such as product mix, pricing, advertising and sales promotion, selling and distribution channels.	Non-routine analytical
2432	Public Relations Professionals	(a) planning and organizing publicity campaigns and communication strategies;	Non-routine analytical
2432	Public Relations Professionals	(b) advising executives on the public relations implications of their policies, programmes and practices, and preparing and controlling the issue of news and press releases;	Non-routine analytical
2432	Public Relations Professionals	(c) undertaking and commissioning public opinion research, analysing the findings and planning public relations and promotional campaigns;	Non-routine analytical
2432	Public Relations Professionals	(d) organizing special events, seminars, entertainment, competitions and social functions to promote goodwill and favourable publicity;	Routine cognitive
2432	Public Relations Professionals	(e) representing organizations and arranging interviews with publicity media;	Non-routine interpersonal
2432	Public Relations Professionals	(f) attending business, social and other functions to promote the organization;	Non-routine interpersonal
2432	Public Relations Professionals	(g) commissioning and obtaining photographs and other illustrative material;	Non-routine interpersonal
2432	Public Relations Professionals	(h) selecting, appraising and revising material submitted by publicity writers, photographers, illustrators and others to create favourable publicity.	Non-routine analytical

2433	Technical and Medical Sales Professionals (excluding ICT)	(a) compiling lists of prospective client businesses by using directories and other sources;	Routine cognitive
2433	Technical and Medical Sales Professionals (excluding ICT)	(b) acquiring and updating knowledge of employers' and competitors' goods and services, and of market conditions;	Routine cognitive
2433	Technical and Medical Sales Professionals (excluding ICT)	(c) visiting regular and prospective client businesses to establish and act on selling opportunities;	Routine cognitive
2433	Technical and Medical Sales Professionals (excluding ICT)	(d) assessing clients' needs and resources and recommending appropriate goods or services;	Non-routine analytical
2433	Technical and Medical Sales Professionals (excluding ICT)	(e) providing input to product design where goods or services must be tailored to suit clients' needs;	Non-routine analytical
2433	Technical and Medical Sales Professionals (excluding ICT)	(f) developing reports and proposals as part of sales presentations to demonstrate benefits from the use of goods or services;	Non-routine analytical
2433	Technical and Medical Sales Professionals (excluding ICT)	(g) estimating costs of installing and maintaining equipment or service;	Non-routine analytical
2433	Technical and Medical Sales Professionals (excluding ICT)	(h) monitoring customers' changing needs and competitor activity, and reporting these developments to sales management;	Non-routine analytical
2433	Technical and Medical Sales Professionals (excluding ICT)	(i) quoting and negotiating prices and credit terms, and preparing and administering sales contracts;	Routine cognitive
2433	Technical and Medical Sales Professionals (excluding ICT)	(j) arranging delivery of goods, installation of equipment and the provision of services;	Non-routine interpersonal

2433	Technical and Medical Sales Professionals (excluding ICT)	(k) reporting to sales management on sales made and the marketability of goods and services;	Non-routine interpersonal
2433	Technical and Medical Sales Professionals (excluding ICT)	(l) consulting with clients after sale to ensure a satisfactory resolution of any problems, and provide ongoing support.	Non-routine interpersonal
2434	Information and Communications Technology Sales Professionals	(a) soliciting orders and selling goods to retail, industrial, wholesale and other establishments;	Routine cognitive
2434	Information and Communications Technology Sales Professionals	(b) selling technical equipment, supplies and related services to business establishments or individuals;	Routine cognitive
2434	Information and Communications Technology Sales Professionals	(c) discussing the needs of new and existing customers and providing specialized information about how particular equipment, supplies and services meet those needs;	Non-routine interpersonal
2434	Information and Communications Technology Sales Professionals	(d) quoting and negotiating prices and credit terms, and completing contracts and recording orders;	Routine cognitive
2434	Information and Communications Technology Sales Professionals	(e) updating customer records and preparing sales reports;	Routine cognitive

2434	Information and Communications Technology Sales Professionals	(f) arranging delivery of goods, installation of equipment and the provision of services;	Routine cognitive
2434	Information and Communications Technology Sales Professionals	(g) reporting customers' reactions and requirements to manufacturers.	Routine cognitive
2511	Systems Analysts	(a) consulting with users to formulate document requirements and with management to ensure agreement on systems principles;	Non-routine interpersonal
2511	Systems Analysts	(b) identifying and analysing business processes, procedures and work practices;	Non-routine analytical
2511	Systems Analysts	(c) identifying and evaluating inefficiencies and recommending optimal business practices and system functionality and behaviour;	Non-routine analytical
2511	Systems Analysts	(d) taking responsibility for deploying functional solutions, such as creating, adopting and implementing system test plans;	Non-routine analytical
2511	Systems Analysts	(e) developing functional specifications for use by systems developers;	Non-routine analytical
2511	Systems Analysts	(f) expanding or modifying systems to improve workflow or serve new purposes;	Non-routine analytical
2511	Systems Analysts	(g) coordinating and linking the computer systems within an organization to increase compatibility.	Non-routine interpersonal
2512	Software Developers	researching, analysing and evaluating requirements for software applications and operating systems;	Non-routine analytical

2512	Software Developers	researching, designing and developing computer software systems;	Non-routine analytical
2512	Software Developers	consulting with engineering staff to evaluate interfaces between hardware and software;	Non-routine analytical
2512	Software Developers	developing and directing software testing and validation procedures;	Non-routine analytical
2512	Software Developers	modifying existing software to correct errors, to adapt it to new hardware or to upgrade interfaces and improve performance;	Non-routine analytical
2512	Software Developers	directing software programming and development of documentation;	Non-routine interpersonal
2512	Software Developers	assessing, developing, upgrading and documenting maintenance procedures for operating systems, communications environments and applications software;	Non-routine analytical
2512	Software Developers	consulting with customers concerning maintenance of software systems.	Non-routine interpersonal
2513	Web and Multimedia Developers	analysing, designing and developing Internet sites by applying a mixture of artistry and creativity with software programming and scripting languages and interfacing with operating environments;	Non-routine analytical
2513	Web and Multimedia Developers	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;	Non-routine analytical

2513	Web and Multimedia Developers	communicating with network specialists regarding web-related issues such as security and hosting websites, to control and enforce Internet and web server security, space allocation, user access, business continuity, website backup and disaster recovery planning;	Non-routine interpersonal
2513	Web and Multimedia Developers	designing, developing and integrating computer code with other specialized inputs such as image files, audio files and scripting languages, to produce, maintain and support websites;	Non-routine analytical
2513	Web and Multimedia Developers	assisting in analysing, specifying and developing Internet strategies, web-based methodologies and development plans.	Non-routine analytical
2514	Applications Programmers	writing and maintaining program code outlined in instructions and specifications in accordance with quality accredited standards;	Non-routine analytical
2514	Applications Programmers	revising, repairing or expanding existing programs to increase operating efficiency or adapt to new requirements;	Non-routine analytical
2514	Applications Programmers	conducting trial runs of programs and software applications to confirm that they will produce the desired information;	Non-routine analytical
2514	Applications Programmers	compiling and writing documentation of program development;	Routine cognitive
2514	Applications Programmers	identifying and communicating technical problems, processes and solutions.	Non-routine analytical



2523	Computer Network Professionals	(a) analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems;	Non-routine analytical
2523	Computer Network Professionals	(b) researching, analysing, evaluating and monitoring network infrastructure to ensure that networks are configured to operate at optimal performance;	Non-routine analytical
2523	Computer Network Professionals	(c) assessing and recommending improvements to network operations and integrated hardware, software, communications and operating systems;	Non-routine analytical
2523	Computer Network Professionals	(d) providing specialist skills in supporting and troubleshooting network problems and emergencies;	Non-routine analytical
2523	Computer Network Professionals	(e) installing, configuring, testing, maintaining and administering new and upgraded networks, software database applications, servers and workstations;	Routine cognitive
2523	Computer Network Professionals	(f) preparing and maintaining procedures and documentation for network inventory, and recording diagnosis and resolution of network faults, enhancements and modifications to networks and maintenance instructions;	Routine cognitive
2523	Computer Network Professionals	(g) monitoring network traffic and activity, capacity and usage to ensure continued integrity and optimal network performance.	Non-routine analytical

2635	Social Work and Counselling Professionals	(a) interviewing clients individually, in families or in groups, to assess their situation and problems and determine the types of services required;	Non-routine interpersonal
2635	Social Work and Counselling Professionals	(b) analysing the client's situation and presenting alternative approaches to resolving problems;	Non-routine analytical
2635	Social Work and Counselling Professionals	(c) compiling case records or reports for courts and other legal proceedings;	Routine cognitive
2635	Social Work and Counselling Professionals	(d) 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;	Non-routine interpersonal
2635	Social Work and Counselling Professionals	(e) 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;	Non-routine analytical
2635	Social Work and Counselling Professionals	(f) investigating cases of abuse or neglect and taking action to protect children and other persons at risk;	Non-routine analytical
2635	Social Work and Counselling Professionals	(g) 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;	Non-routine interpersonal

2635	Social Work and Counselling Professionals	(h) providing advice to prison governors and to probation and parole review boards that helps determine whether, and under what conditions, an offender should be incarcerated, released from prison or undergo alternative correctional measures;	Non-routine interpersonal
2635	Social Work and Counselling Professionals	(i) acting as advocates for client groups in the community and lobbying for solutions to problems affecting them;	Non-routine analytical
2635	Social Work and Counselling Professionals	(j) developing prevention and intervention programmes to meet community needs;	Non-routine analytical
2635	Social Work and Counselling Professionals	(k) maintaining contact with other social service agencies, educational institutions and health care providers involved with clients to provide information and obtain feedback on clients' overall situation and progress.	Non-routine interpersonal
2636	Religious Professionals	(a) perpetuating sacred traditions, practices and beliefs;	Non-routine interpersonal
2636	Religious Professionals	(b) conducting religious services, rites and ceremonies;	Non-routine interpersonal
2636	Religious Professionals	(c) undertaking various administrative and social duties, including participating in committees and meetings of religious organizations;	Non-routine interpersonal
2636	Religious Professionals	(d) providing spiritual and moral guidance in accordance with the religion professed;	Non-routine interpersonal
2636	Religious Professionals	(e) propagating religious doctrines in own country or abroad;	Non-routine interpersonal
2636	Religious Professionals	(f) preparing and presenting religious sermons;	Non-routine interpersonal

2636	Religious Professionals	(g) developing and directing study courses and religious education programmes;	Non-routine analytical
2636	Religious Professionals	(h) counselling individuals regarding interpersonal, health, financial and religious problems;	Non-routine interpersonal
2636	Religious Professionals	(i) scheduling and participating in special events such as camps, conferences, seminars and retreats.	Non-routine interpersonal
2641	Authors and Related Writers	(a) conceiving, writing and editing novels, plays, scripts, poetry and other material for publication or presentation;	Non-routine analytical
2641	Authors and Related Writers	(b) conducting research to establish factual content and to obtain other necessary information;	Non-routine analytical
2641	Authors and Related Writers	(c) writing scripts and continuities and preparing programmes for stage, film, radio and television productions;	Non-routine analytical
2641	Authors and Related Writers	(d) analysing material, such as specifications, notes and drawings, and creating manuals, instructions for use, user guides and other documents to explain clearly and concisely the installation, operation and maintenance of software, electronic, mechanical and other equipment;	Non-routine analytical
2641	Authors and Related Writers	(e) writing brochures, handbooks and similar technical publications;	Non-routine analytical
2641	Authors and Related Writers	(f) selecting material for publication, checking style, grammar and accuracy of content, arranging for any necessary revisions and checking proof copies before printing.	Routine cognitive

2642	Journalists	(a) 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;	Non-routine analytical
2642	Journalists	(b) collecting, reporting and commenting on news and current affairs for publication in newspapers and periodicals, or for broadcasting by radio, television or webcast media;	Non-routine analytical
2642	Journalists	(c) receiving, analysing and verifying news and other copy for accuracy;	Non-routine analytical
2642	Journalists	(d) interviewing politicians and other public figures at press conferences and on other occasions, including individual interviews recorded for radio, television or webcast media;	Non-routine interpersonal
2642	Journalists	(e) researching and reporting on developments in specialized fields such as medicine, science and technology;	Non-routine analytical
2642	Journalists	(f) writing editorials and commentaries on topics of current interest to stimulate public interest and express the views of a publication or broadcasting station;	Non-routine analytical
2642	Journalists	(g) writing critical reviews of literary, musical and other artistic works based on knowledge, judgement and experience for newspapers, television, radio and other media;	Non-routine analytical
2642	Journalists	(h) selecting material for publication, checking style, grammar, accuracy and legality of content and	Non-routine analytical

		arranging for any necessary revisions;	
2642	Journalists	(i) liaising with production staff in checking final proof copies immediately prior to printing;	Non-routine interpersonal
2642	Journalists	(j) selecting, assembling and preparing publicity material about business or other organizations for issue through press, radio, television and other media.	Non-routine analytical
2651	Visual Artists	conceiving and developing ideas, designs and styles for paintings, drawings and sculptures;	Non-routine analytical
2651	Visual Artists	arranging objects, positioning models, and selecting landscapes and other visual forms according to chosen subject matter;	Non-routine analytical
2651	Visual Artists	selecting artistic media, method and materials;	Non-routine analytical
2651	Visual Artists	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;	Non-routine analytical
2651	Visual Artists	creating representational or abstract drawings and paintings using pencils, ink, chalk, oil paints, water colours or through the application of other techniques;	Non-routine analytical
2651	Visual Artists	creating drawings and engraving or etching them on metal, wood or other materials;	Non-routine analytical
2651	Visual Artists	creating cartoons to depict persons and events, often in caricature;	Non-routine analytical

2651	Visual Artists	restoring damaged, soiled and faded paintings and other art objects.	Non-routine analytical
2652	Musicians, Singers and Composers	creating melodic, harmonic and rhythmic structures to express ideas and emotions in musical form;	Non-routine analytical
2652	Musicians, Singers and Composers	translating ideas and concepts into standard musical signs and symbols for reproduction and performance;	Non-routine analytical
2652	Musicians, Singers and Composers	adapting or arranging music for particular instrumental or vocal groups, instruments or occasions;	Non-routine analytical
2652	Musicians, Singers and Composers	conducting instrumental or vocal groups;	Non-routine interpersonal
2652	Musicians, Singers and Composers	selecting music for performances and assigning instrumental parts to musicians;	Non-routine analytical
2652	Musicians, Singers and Composers	playing one or more musical instruments as a soloist or as a member of an orchestra or a musical group;	Non-routine interpersonal
2652	Musicians, Singers and Composers	singing as a soloist or as a member of a vocal group or other band;	Non-routine interpersonal
2652	Musicians, Singers and Composers	practising and rehearsing to maintain a high standard of performance.	Non-routine interpersonal
2653	Dancers and Choreographers	conceiving and creating dances, which often convey a story, theme, idea or mood, by a pattern of steps, movements and gestures;	Non-routine interpersonal
2653	Dancers and Choreographers	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;	Non-routine interpersonal

2653	Dancers and Choreographers	training, exercising and attending dance classes to maintain the required levels of ability and fitness;	Non-routine interpersonal
2653	Dancers and Choreographers	directing and participating in rehearsals to practice dance steps and techniques required for a performance;	Non-routine interpersonal
2653	Dancers and Choreographers	auditioning for dance roles or for membership in dance companies;	Non-routine interpersonal
2653	Dancers and Choreographers	coordinating the production music with the music directors.	Non-routine interpersonal
2654	Film, Stage and Related Directors and Producers	(a) choosing writers, studying scripts to determine artistic interpretation, and instructing actors on acting methods;	Non-routine analytical
2654	Film, Stage and Related Directors and Producers	(b) 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;	Non-routine interpersonal
2654	Film, Stage and Related Directors and Producers	(c) planning, organizing and controlling the various stages and scheduling involved in the production of presentations, motion pictures, television shows and radio programmes;	Non-routine interpersonal
2654	Film, Stage and Related Directors and Producers	(d) engaging and supervising all technical personnel, and determining the treatment, scope and scheduling of production;	Non-routine interpersonal
2654	Film, Stage and Related Directors and Producers	(e) maintaining production archives and negotiating royalties;	Non-routine interpersonal
2654	Film, Stage and Related Directors and Producers	(f) creating, planning or writing scripts for recording, videotaping and editing programmes;	Non-routine analytical



2654	Film, Stage and Related Directors and Producers	(g) supervising the positioning of scenery, props and lighting and sound equipment.	Non-routine interpersonal
2656	Announcers on Radio, Television and Other Media	(a) reading news bulletins and making other announcements on radio or television;	Routine cognitive
2656	Announcers on Radio, Television and Other Media	(b) introducing performing artists or persons being interviewed, and making related announcements on radio, television, or in theatres, night clubs and other establishments;	Routine cognitive
2656	Announcers on Radio, Television and Other Media	(c) interviewing persons in public, especially on radio and television;	Non-routine interpersonal
2656	Announcers on Radio, Television and Other Media	(d) studying background information in order to prepare for programmes or interviews;	Non-routine analytical
2656	Announcers on Radio, Television and Other Media	(e) commenting on music and other matters, such as weather or traffic conditions.	Non-routine interpersonal
2659	Creative and Performing Artists Not Elsewhere Classified	(a) performing amusing antics and telling funny stories;	Non-routine interpersonal
2659	Creative and Performing Artists Not Elsewhere Classified	(b) performing tricks of illusion and sleight of hand, and feats of hypnotism;	Non-routine interpersonal
2659	Creative and Performing Artists Not Elsewhere Classified	(c) performing difficult and spectacular acrobatics, and gymnastic or juggling feats;	Non-routine interpersonal

2659	Creative and Performing Artists Not Elsewhere Classified	(d) training and performing with animals.	Non-routine interpersonal
3112	Civil Engineering Technicians	(a) performing or assisting with field and laboratory tests of soils and construction materials;	Non-routine analytical
3112	Civil Engineering Technicians	(b) providing technical assistance connected with the construction of buildings and other structures, and with surveys or the preparation of survey reports;	Non-routine analytical
3112	Civil Engineering Technicians	(c) ensuring compliance with design specifications, relevant legislation and regulations, and maintenance of desired standards of materials and work;	Routine cognitive
3112	Civil Engineering Technicians	(d) applying technical knowledge of building and civil engineering principles and practices in order to identify and solve problems arising;	Non-routine analytical
3112	Civil Engineering Technicians	(e) assisting with the preparation of detailed estimates of quantities and costs of materials and labour required for projects, according to the specifications given;	Non-routine analytical
3112	Civil Engineering Technicians	(f) organizing maintenance and repairs;	Non-routine manual physical
3112	Civil Engineering Technicians	(g) inspecting buildings and structures during and after construction to ensure that they comply with building, grading, zoning and safety laws and approved plans, specifications and standards, as well as with other rules	Routine cognitive

		concerning quality and safety of buildings;	
3112	Civil Engineering Technicians	(h) inspecting industrial plant, hotels, cinemas and other buildings and structures to detect fire hazards and advise on how they can be removed;	Routine cognitive
3112	Civil Engineering Technicians	(i) advising on the installation of fire detectors and sprinkler systems and the use of materials in the construction of buildings, and means of transportation to reduce risk of fire and extent of damage and danger if fire occurs.	Non-routine analytical
3113	Electrical Engineering Technicians	providing technical assistance in research on and development of electrical equipment and facilities, or testing prototypes;	Non-routine analytical
3113	Electrical Engineering Technicians	designing and preparing blueprints of electrical installations and circuitry according to the specifications given;	Non-routine analytical
3113	Electrical Engineering Technicians	preparing detailed estimates of quantities and costs of materials and labour required for manufacture and installation, according to the specifications given;	Non-routine analytical
3113	Electrical Engineering Technicians	monitoring technical aspects of the manufacture, installation, utilization, maintenance and repair of electrical systems and equipment to ensure satisfactory performance and compliance with specifications and regulations;	Non-routine analytical

3113	Electrical Engineering Technicians	planning installation methods, checking completed installations for safety and controls or undertaking the initial running of the new electrical equipment or systems;	Non-routine analytical
3113	Electrical Engineering Technicians	assembling, installing, testing, calibrating, modifying and repairing electrical equipment and installations to conform with regulations and safety requirements.	Non-routine manual physical
3114	Electronics Engineering Technicians	providing technical assistance in research and development of electronic equipment, or testing prototypes;	Non-routine analytical
3114	Electronics Engineering Technicians	designing and preparing blueprints of electronic circuitry according to the specifications given;	Non-routine analytical
3114	Electronics Engineering Technicians	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;	Non-routine analytical
3114	Electronics Engineering Technicians	monitoring technical aspects of the manufacture, utilization, maintenance and repair of electronic equipment to ensure satisfactory performance and ensure compliance with specifications and regulations;	Routine cognitive
3114	Electronics Engineering Technicians	assisting in the design, development, installation, operation and maintenance of electronic systems;	Non-routine analytical
3114	Electronics Engineering Technicians	planning installation methods, checking completed installations for safety and controls or undertaking the initial running of the new electronic equipment or system;	Non-routine analytical

3114	Electronics Engineering Technicians	conducting tests of electronic systems, collecting and analysing data, and assembling circuitry in support of electronics engineers.	Routine cognitive
3115	Mechanical Engineering Technicians	(a) providing technical assistance in research on and development of machines and mechanical installations, facilities and components, or testing prototypes;	Non-routine analytical
3115	Mechanical Engineering Technicians	(b) designing and preparing layouts of machines and mechanical installations, facilities and components, according to the specifications given;	Non-routine analytical
3115	Mechanical Engineering Technicians	(c) preparing detailed estimates of quantities and costs of materials and labour required for manufacture and installation, according to the specifications given;	Non-routine analytical
3115	Mechanical Engineering Technicians	(d) monitoring technical aspects of manufacture, utilization, maintenance and repair of machines and mechanical installations, facilities and components to ensure satisfactory performance and compliance with specifications and regulations;	Non-routine analytical
3115	Mechanical Engineering Technicians	(e) developing and monitoring the implementation of safety standards and procedures for marine survey work in relation to ships' hulls, equipment and cargoes;	Routine cognitive
3115	Mechanical Engineering Technicians	(f) assembling and installing new and modified mechanical assemblies, components, machine tools and controls, and hydraulic power systems;	Non-routine manual physical

3115	Mechanical Engineering Technicians	(g) conducting tests of mechanical systems, collecting and analysing data, and assembling and installing mechanical assemblies in support of mechanical engineers;	Non-routine analytical
3115	Mechanical Engineering Technicians	(h) ensuring that mechanical engineering designs and finished work are within specifications, regulations and contract provisions.	Routine cognitive
3117	Mining and Metallurgical Technicians	(a) providing technical assistance to aid in research on and development of processes to determine the properties of metals and new alloys;	Non-routine analytical
3117	Mining and Metallurgical Technicians	(b) 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;	Non-routine analytical
3117	Mining and Metallurgical Technicians	(c) preparing detailed estimates of quantities and costs of materials and labour required for mineral, oil and natural gas exploration, extraction, processing and transport projects;	Non-routine analytical
3117	Mining and Metallurgical Technicians	(d) 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;	Routine cognitive
3117	Mining and Metallurgical Technicians	(e) helping plan and design mines, mine shafts, tunnels	Non-routine analytical

		and underground first-aid facilities;	
3117	Mining and Metallurgical Technicians	(f) collecting and preparing rock, mineral and metal samples, performing laboratory tests to determine properties, analysing and reporting test results and maintaining testing equipment;	Routine cognitive
3117	Mining and Metallurgical Technicians	(g) using microscopes, electromagnetic irradiation machines, spectrometers, spectrographs, densitometers and tension testing machines;	Routine cognitive
3117	Mining and Metallurgical Technicians	(h) 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.	Non-routine analytical
3118	Draughtspersons	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;	Non-routine analytical
3118	Draughtspersons	operating computer-aided design and draughting equipment to create, modify and generate hard-copy and digital representations of working drawings;	Routine cognitive

3118	Draughtspersons	operating digitizing table or similar equipment to transfer hard-copy representation of working drawings, maps and other curves to digital form;	Routine cognitive
3118	Draughtspersons	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;	Non-routine analytical
3118	Draughtspersons	copying drawings and paintings onto stone or metal plates for printing;	Non-routine analytical
3118	Draughtspersons	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;	Non-routine analytical
3118	Draughtspersons	creating detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods and other engineering information;	Non-routine analytical
3118	Draughtspersons	arranging for completed drawings to be reproduced for use as working drawings.	Routine cognitive
3119	Physical and Engineering Science Technicians Not Elsewhere Classified	(a) collecting data and providing technical assistance regarding: efficient, safe and economic utilization of personnel, material and equipment; methods of work and sequence of operations and supervision of their implementation; and efficient layout of plant or establishment;	Non-routine analytical



3119	Physical and Engineering Science Technicians Not Elsewhere Classified	(b) aiding in the identification of potential hazards and introducing safety procedures and devices;	Routine cognitive
3119	Physical and Engineering Science Technicians Not Elsewhere Classified	(c) modifying and testing equipment and devices used in the prevention, control and remediation of environmental pollution, in site remediation and land reclamation;	Routine manual
3119	Physical and Engineering Science Technicians Not Elsewhere Classified	(d) assisting in the development of environmental pollution remediation devices under the direction of an engineer;	Non-routine analytical
3119	Physical and Engineering Science Technicians Not Elsewhere Classified	(e) assisting engineers in testing and designing robotics equipment.	Non-routine analytical
3122	Manufacturing Supervisors	coordinating and supervising the activities of process control technicians, machine operators, assemblers and other manufacturing labourers;	Non-routine interpersonal
3122	Manufacturing Supervisors	organizing and planning the daily work with regard to plans, economy, staff and environment;	Non-routine interpersonal
3122	Manufacturing Supervisors	preparing cost estimates, records and reports;	Non-routine analytical
3122	Manufacturing Supervisors	identifying shortage of staff or components;	Non-routine analytical
3122	Manufacturing Supervisors	ensuring safety of workers;	Non-routine interpersonal
3122	Manufacturing Supervisors	instructing and training new staff.	Non-routine interpersonal
3123	Construction Supervisors	reading specifications to determine construction	Routine cognitive

		requirements and planning procedures;	
3123	Construction Supervisors	organizing and coordinating the material and human resources required to complete jobs;	Non-routine interpersonal
3123	Construction Supervisors	examining and inspecting work progress;	Non-routine interpersonal
3123	Construction Supervisors	examining equipment and construction sites to ensure that health and safety requirements are met;	Routine cognitive
3123	Construction Supervisors	supervising construction sites and coordinating work with other construction projects;	Non-routine interpersonal
3123	Construction Supervisors	supervising the activities of building trades workers, labourers and other construction workers.	Non-routine interpersonal
3131	Power Production Plant Operators	operating, monitoring and inspecting various types of energy-generating power plants;	Routine manual
3131	Power Production Plant Operators	operating and controlling power-generating systems and equipment including boilers, turbines, generators, condensers and reactors in hydro, thermal, coal, oil, natural gas and nuclear power plants to generate and distribute electrical power;	Routine manual
3131	Power Production Plant Operators	controlling start-up and shut-down of power plant equipment, controlling switching operations, regulating water levels and communicating with systems operators to regulate and coordinate transmission loads, frequency and line voltages;	Routine manual

3131	Power Production Plant Operators	taking readings from charts, meters and gauges at established intervals, troubleshooting and performing corrective action as necessary;	Routine cognitive
3131	Power Production Plant Operators	completing and maintaining station records, logs and reports, and communicating with other plant personnel to assess equipment operating status;	Routine cognitive
3131	Power Production Plant Operators	cleaning and maintaining equipment such as generators, boilers, turbines, pumps and compressors in order to prevent equipment failure or deterioration.	Non-routine manual physical
3132	Incinerator and Water Treatment Plant Operators	(a) operating and monitoring computerized control systems, machinery and related equipment in wastewater treatment, sewage treatment, and liquid waste plants to regulate flow, treatment and disposal of sewage and wastes, and in water filtration and treatment plants to regulate the treatment and distribution of water for human consumption and for later disposal into natural water systems;	Routine manual
3132	Incinerator and Water Treatment Plant Operators	(b) controlling the operation of multiple-hearth incinerator furnaces and related equipment to burn sludge and solid waste in waste treatment plants;	Routine manual
3132	Incinerator and Water Treatment Plant Operators	(c) inspecting equipment and monitoring operating conditions, meters, filters, chlorinators and gauges in central control rooms to determine load requirements, to verify that flows, pressures and temperatures are within	Routine cognitive

		specification, and to detect malfunctions;	
3132	Incinerator and Water Treatment Plant Operators	(d) monitoring and adjusting controls of auxiliary equipment such as exhaust emissions, scrubbers and incinerator heat recovery units;	Routine manual
3132	Incinerator and Water Treatment Plant Operators	(e) collecting and testing water and sewage samples for chemical and bacterial content, using test equipment and colour analysis standards;	Routine cognitive
3132	Incinerator and Water Treatment Plant Operators	(f) analysing test results to make adjustments to plant equipment and systems to disinfect and deodorize water and other liquids;	Non-routine analytical
3132	Incinerator and Water Treatment Plant Operators	(g) performing security and safety checks in plant and on grounds;	Routine cognitive
3132	Incinerator and Water Treatment Plant Operators	(h) completing and maintaining plant logs and reports.	Routine cognitive
3133	Chemical Processing Plant Controllers	operating electronic or computerized control panels from a central control room to monitor and optimize physical and chemical processes for several processing units;	Routine manual
3133	Chemical Processing Plant Controllers	adjusting equipment, valves, pumps, controls and process equipment;	Non-routine manual physical

3133	Chemical Processing Plant Controllers	controlling the preparation, measuring and feeding of raw materials and processing agents such as catalysts and filtering media into plant;	Routine manual
3133	Chemical Processing Plant Controllers	controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment;	Routine manual
3133	Chemical Processing Plant Controllers	verifying equipment for malfunctions, carrying out routine operating tests and arranging for maintenance;	Routine cognitive
3133	Chemical Processing Plant Controllers	analysing sample products, performing tests, recording data and writing production logs.	Non-routine analytical
3139	Process Control Technicians Not Elsewhere Classified	cannot be determined	#N/A
3142	Agricultural Technicians	(a) preparing materials and equipment for experiments, tests and analyses;	Non-routine manual physical
3142	Agricultural Technicians	(b) collecting and preparing specimens such as soils, plant or animal cells, tissues or parts of animal organs for experiments, tests and analyses;	Non-routine manual physical
3142	Agricultural Technicians	(c) assisting with and performing experiments, tests and analyses applying methods and techniques such as microscopy, histochemistry, chromatography, electrophoresis and spectroscopy;	Non-routine analytical
3142	Agricultural Technicians	(d) identifying pathogenic micro-organisms and insects, parasites, fungi and weeds harmful to crops and livestock, and assisting in devising methods of control;	Non-routine analytical

3142	Agricultural Technicians	(e) analysing produce to set and maintain standards of quality;	Non-routine analytical
3142	Agricultural Technicians	(f) conducting or supervising operational programmes such as fish hatchery, greenhouse and livestock production programmes;	Non-routine interpersonal
3142	Agricultural Technicians	(g) analysing samples of seeds for quality, purity and germination rating;	Non-routine analytical
3142	Agricultural Technicians	(h) collecting data and estimating quantities and costs of materials and labour required for projects;	Non-routine analytical
3142	Agricultural Technicians	(i) organizing maintenance and repairs of research equipment.	Non-routine manual physical
3151	Ships' Engineers	controlling and participating in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship;	Non-routine manual physical
3151	Ships' Engineers	ordering fuel and other engine-room department stores and maintaining records of operations;	Routine cognitive
3151	Ships' Engineers	performing technical supervision of the installation, maintenance and repair of ships' machinery and equipment to ensure compliance with specifications and regulations;	Non-routine interpersonal
3151	Ships' Engineers	inspecting and conducting maintenance and emergency repairs to engines, machinery and auxiliary equipment;	Routine cognitive
3151	Ships' Engineers	standing engine room watch, monitoring and noting performance of engines, machinery and auxiliary equipment.	Routine cognitive

3152	Ships' Deck Officers and Pilots	commanding and navigating ship or similar vessel at sea or on inland waterways;	Non-routine interpersonal
3152	Ships' Deck Officers and Pilots	controlling and participating in deck and bridge watch activities;	Routine cognitive
3152	Ships' Deck Officers and Pilots	navigating vessels into and out of ports and through channels, straits and other waters where special knowledge is required;	Non-routine manual physical
3152	Ships' Deck Officers and Pilots	ensuring safe loading and unloading of cargo and observance of safety regulations and procedures by crew and passengers;	Routine cognitive
3152	Ships' Deck Officers and Pilots	performing technical supervision of maintenance and repair of ships to ensure compliance with specifications and regulations;	Non-routine interpersonal
3152	Ships' Deck Officers and Pilots	applying knowledge of principles and practices relating to ships' operation and navigation in order to identify and solve problems arising in the course of their work;	Non-routine analytical
3152	Ships' Deck Officers and Pilots	ordering ships' stores, recruiting crew as required and maintaining records of operations;	Routine cognitive
3152	Ships' Deck Officers and Pilots	transmitting and receiving routine and emergency information with shore stations and other ships.	Routine cognitive
3212	Medical and Pathology Laboratory Technicians	conducting chemical analysis of body fluids, including blood, urine and spinal fluid, to determine presence of normal and abnormal components;	Non-routine analytical

3212	Medical and Pathology Laboratory Technicians	operating, calibrating and maintaining equipment used in quantitative and qualitative analysis, such as spectrophotometers, calorimeters, flame photometers and computer-controlled analysers;	Routine manual
3212	Medical and Pathology Laboratory Technicians	entering data from analysis of laboratory tests and clinical results into record-keeping systems, and reporting results to medical practitioners and other health professionals;	Routine cognitive
3212	Medical and Pathology Laboratory Technicians	analysing samples of biological material for chemical content or reaction;	Non-routine analytical
3212	Medical and Pathology Laboratory Technicians	setting up, cleaning and maintaining laboratory equipment;	Non-routine manual physical
3212	Medical and Pathology Laboratory Technicians	analysing laboratory findings to check the accuracy of the results;	Non-routine analytical
3212	Medical and Pathology Laboratory Technicians	establishing and monitoring programmes to ensure the accuracy of laboratory results, and developing, standardizing, evaluating and modifying procedures, techniques and tests used in the analysis of specimens;	Non-routine analytical
3212	Medical and Pathology Laboratory Technicians	obtaining specimens, cultivating, isolating and identifying microorganisms for analysis;	Non-routine analytical
3212	Medical and Pathology Laboratory Technicians	examining cells stained with dye to locate abnormalities;	Non-routine analytical



3212	Medical and Pathology Laboratory Technicians	inoculating fertilized eggs, broths, or other bacteriological media with organisms.	Non-routine analytical
3213	Pharmaceutical Technicians and Assistants	(a) preparing medications and other pharmaceutical compounds under the guidance of a pharmacist or other health professional;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(b) dispensing medicines and drugs to clients and giving written and oral instructions on their use, as prescribed by medical doctors, veterinarians or other health professionals;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(c) receiving prescriptions or refill requests from health professionals and verifying that information is complete and accurate according to medical record-keeping standards;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(d) maintaining proper storage and security conditions for drugs;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(e) filling and labelling containers with prescribed medications;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(f) assisting clients by answering questions, locating items or referring them to a pharmacist for medication information;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(g) pricing and filing prescriptions that have been filled and establishing and maintaining patient records, including lists of medications taken by individual patients;	Routine cognitive
3213	Pharmaceutical Technicians and Assistants	(h) ordering, labelling, and counting stocks of medications, chemicals and supplies, and entering inventory data into record-keeping systems;	Routine cognitive

3213	Pharmaceutical Technicians and Assistants	(i) cleaning and preparing equipment and containers used to prepare and dispense medicines and pharmaceutical compounds.	Non-routine manual physical
3214	Medical and Dental Prosthetic Technicians	examining, interviewing and measuring patients in order to determine their appliance needs, and to identify factors that could affect appliance fit;	Routine cognitive
3214	Medical and Dental Prosthetic Technicians	conferring with medical and dental practitioners in order to formulate specifications and prescriptions for devices and appliances;	Non-routine interpersonal
3214	Medical and Dental Prosthetic Technicians	interpreting prescriptions or specifications to determine the type of product or device to be fabricated, and the materials and tools that will be required;	Non-routine analytical
3214	Medical and Dental Prosthetic Technicians	making or receiving casts or impressions of patients' torsos, limbs, mouths or teeth for use as fabrication patterns;	Routine cognitive
3214	Medical and Dental Prosthetic Technicians	designing and making orthotic and prosthetic devices using materials such as thermoplastic and thermosetting materials, metal alloys and leather, and hand and power tools;	Non-routine analytical
3214	Medical and Dental Prosthetic Technicians	fitting appliances and devices to patients, testing and evaluating them, and making adjustments for proper fit, function and comfort;	Routine cognitive
3214	Medical and Dental Prosthetic Technicians	repairing, modifying and maintaining medical and dental prosthetic and supportive devices, according to specifications;	Non-routine manual physical
3214	Medical and Dental Prosthetic Technicians	bending, forming and shaping fabric or material so that it conforms to prescribed contours needed to fabricate structural components;	Non-routine manual physical

3214	Medical and Dental Prosthetic Technicians	fabricating full and partial dentures and constructing mouth guards, crowns, metal clasps, inlays, bridgework and other aids;	Non-routine manual physical
3214	Medical and Dental Prosthetic Technicians	instructing patients in the use and care of prosthetic or orthotic devices.	Non-routine interpersonal
3240	Veterinary Technicians and Assistants	advising communities and individuals on the treatment of animals and their diseases and injuries;	Non-routine analytical
3240	Veterinary Technicians and Assistants	conducting examinations of animals to make diagnoses or refer more difficult cases to veterinarians when needed;	Non-routine analytical
3240	Veterinary Technicians and Assistants	treating ill or injured animals, especially for common diseases and disorders;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	cleaning and sterilising examination tables and instruments and preparing materials used in the examination and treatment of animals;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	carrying out technical tasks connected with artificial insemination of animals;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	getting animals ready for examination or treatment and restraining or holding them during treatment;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	assisting veterinarians to administer anaesthetics and oxygen during treatment;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	placing animals in cages for recovery from operations and monitoring their condition;	Non-routine manual physical
3240	Veterinary Technicians and Assistants	producing radiographs, collecting samples, and performing other laboratory tests to assist in diagnosis of animal health problems;	Non-routine manual physical

3240	Veterinary Technicians and Assistants	performing routine animal dental procedures and assisting veterinarians with animal dentistry.	Routine cognitive
3251	Dental Assistants and Therapists	advising communities and individuals on dental hygiene, diet and other preventive measures to reduce potential risks to oral health;	Non-routine analytical
3251	Dental Assistants and Therapists	conducting visual and physical examinations of patients' mouths, teeth and related structures to assess oral health status;	Non-routine manual physical
3251	Dental Assistants and Therapists	identifying cases of patients with poor oral health or oral disease requiring referral to a dentist or other health professional;	Non-routine analytical
3251	Dental Assistants and Therapists	assisting dentists during complex dental procedures;	Non-routine manual physical
3251	Dental Assistants and Therapists	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;	Non-routine manual physical
3251	Dental Assistants and Therapists	preparing, cleaning and sterilizing dental instruments, equipment and materials used in the examination and treatment of patients;	Non-routine manual physical
3251	Dental Assistants and Therapists	getting patients ready for examination or treatment, including explaining procedures and correct positioning;	Non-routine manual physical
3251	Dental Assistants and Therapists	taking impressions of the mouth and dental radiographs to support diagnosis and fitting of dental prosthetics.	Non-routine analytical

3252	Medical Records and Health Information Technicians	planning, developing, maintaining and operating a variety of health record indexes and storage and retrieval systems to collect, classify, store and analyse information;	Routine cognitive
3252	Medical Records and Health Information Technicians	transcribing, compiling and processing patient medical records, admission and discharge documents, and other medical reports into record-keeping systems to provide data for patient monitoring and referral, epidemiological monitoring, research, billing, cost control and care improvement;	Routine cognitive
3252	Medical Records and Health Information Technicians	reviewing records for completeness, accuracy and compliance with regulations;	Routine cognitive
3252	Medical Records and Health Information Technicians	translating narrative descriptions and numeric information from medical records and other documents on health services delivery into codes associated with standard classification systems;	Routine cognitive
3252	Medical Records and Health Information Technicians	protecting the security of medical records to ensure that confidentiality is maintained, and releasing information to authorized persons and agencies in accordance with regulations;	Routine cognitive
3252	Medical Records and Health Information Technicians	supervising clerical and administrative workers involved in the maintenance of medical records.	Non-routine interpersonal

3253	Community Health Workers	providing information to families and communities on a range of health issues including nutrition, hygiene, infant and child care, immunizations, family planning, risk factors and prevention of common infectious diseases, poisoning prevention, first aid for treatment of simple and common ailments, substance abuse, domestic violence and other topics;	Non-routine interpersonal
3253	Community Health Workers	visiting families in their homes to provide information on the health, social and other services available and support them in gaining access to these services;	Non-routine interpersonal
3253	Community Health Workers	visiting families who do not usually access medical establishments to monitor on a regular basis certain conditions such as progress with pregnancy, child growth and development, and environmental sanitation;	Non-routine interpersonal
3253	Community Health Workers	conducting outreach efforts to groups who do not usually access medical establishments with information and basic medical supplies for prevention and management of certain health conditions for which they are most at risk, such as HIV/AIDS and other communicable diseases;	Non-routine interpersonal
3253	Community Health Workers	collecting data from households and communities who do not usually access medical establishments for purposes of patient monitoring and referral and reporting to meet health regulations.	Non-routine analytical

3254	Dispensing Opticians	examining and taking facial and eye measurements of clients for fitting of eyeglasses and other optical devices;	Non-routine analytical
3254	Dispensing Opticians	providing advice to clients on selection and maintenance of eyeglasses and frames, types of contact lenses and other optical devices for performance, safety, comfort and lifestyle;	Non-routine interpersonal
3254	Dispensing Opticians	interpreting optical prescriptions and preparing work orders for optical laboratories for grinding and mounting of lenses in frames, preparation of contact lenses and other required work;	Non-routine analytical
3254	Dispensing Opticians	verifying exactness of finished optical appliances and devices to the original prescription and fit of clients.	Routine cognitive
3255	Physiotherapy Technicians and Assistants	administering manual treatments such as massage therapy or pressure point therapy;	Routine cognitive
3255	Physiotherapy Technicians and Assistants	administering electrical modality treatments, ultrasound and other physical therapies using specialized techniques and equipment;	Routine cognitive
3255	Physiotherapy Technicians and Assistants	instructing, motivating, safeguarding and assisting patients as they practise physical exercises, relaxation techniques and functional activities;	Non-routine interpersonal
3255	Physiotherapy Technicians and Assistants	conferring with physiotherapists or other health care providers to evaluate patient information for planning, modifying and coordinating treatment;	Non-routine analytical

3255	Physiotherapy Technicians and Assistants	monitoring and recording patients' progress during treatment, including measuring their range-of-joint motion and vital signs;	Non-routine analytical
3255	Physiotherapy Technicians and Assistants	fitting patients for orthopaedic braces, prostheses and other physical support devices such as crutches, and instructing patients in the use of such devices.	Non-routine manual physical
3257	Environmental and Occupational Health Inspectors and Associates	(a) advising employers' and workers' representatives on the implementation of governmental and other rules and regulations concerning occupational safety and the working environment;	Non-routine analytical
3257	Environmental and Occupational Health Inspectors and Associates	(b) inspecting places of work to ensure that the working environment, machinery and equipment conform to governmental and other rules, regulations and standards related to sanitation and/or occupational and environmental health and safety;	Routine cognitive
3257	Environmental and Occupational Health Inspectors and Associates	(c) giving advice on environmental sanitary problems and techniques;	Non-routine interpersonal
3257	Environmental and Occupational Health Inspectors and Associates	(d) inspecting places of work and, by interviews, observations and other means, obtaining information about work practices and accidents to determine compliance with safety rules and regulations;	Routine cognitive



3257	Environmental and Occupational Health Inspectors and Associates	(e) inspecting areas of production, processing, transport, handling, storage and sale of products to ensure conformity with governmental and other rules, regulations and standards;	Routine cognitive
3257	Environmental and Occupational Health Inspectors and Associates	(f) advising enterprises and the general public on the implementation of governmental and other rules and regulations concerning hygiene, sanitation, purity and grading of primary products, food, drugs, cosmetics and similar goods;	Non-routine analytical
3257	Environmental and Occupational Health Inspectors and Associates	(g) inspecting establishments to ensure that they conform to governmental and other rules and regulations concerning emission of pollutants and disposal of dangerous wastes;	Routine cognitive
3257	Environmental and Occupational Health Inspectors and Associates	(h) initiating action to maintain or improve hygiene and prevent pollution of water, air, food or soil;	Non-routine interpersonal
3257	Environmental and Occupational Health Inspectors and Associates	(i) 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;	Non-routine interpersonal
3257	Environmental and Occupational Health Inspectors and Associates	(j) estimating quantities and costs of materials and labour required for health, safety and sanitation remediation projects;	Non-routine analytical

3311	Securities and Finance Dealers and Brokers	(a) obtaining information about the financial circumstances of customers and companies in which investments may be made;	Non-routine interpersonal
3311	Securities and Finance Dealers and Brokers	(b) analysing market trends for securities, bonds, stocks and other financial instruments, including foreign exchange;	Non-routine analytical
3311	Securities and Finance Dealers and Brokers	(c) informing prospective customers about market conditions and prospects;	Non-routine interpersonal
3311	Securities and Finance Dealers and Brokers	(d) advising on and participating in the negotiation of terms for, and organization of, loans and placement of stocks and bonds in the financial market to raise capital for customers;	Non-routine analytical
3311	Securities and Finance Dealers and Brokers	(e) recording and transmitting buy and sell orders for securities, stocks, bonds or other financial instruments and for foreign exchange for future or immediate delivery.	Routine cognitive
3312	Credit and Loans Officers	interviewing applicants for personal, mortgage, student and business loans;	Non-routine interpersonal
3312	Credit and Loans Officers	researching and evaluating loan applicants' financial status, references, credit and ability to repay the loan;	Non-routine analytical
3312	Credit and Loans Officers	submitting credit and loan applications to management with recommendations for approval or rejection;	Routine cognitive
3312	Credit and Loans Officers	approving or rejecting loan applications within authorized limits ensuring that credit standards of the institution are respected;	Routine cognitive
3312	Credit and Loans Officers	keeping records of payments, preparing routine letters requesting payment for overdue accounts and	Routine cognitive

		forwarding these for legal action;	
3312	Credit and Loans Officers	completing credit and loan documentation.	Routine cognitive
3313	Accounting Associate Professionals	maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from accountants;	Routine cognitive
3313	Accounting Associate Professionals	verifying accuracy of documents and records relating to payments, receipts and other financial transactions;	Routine cognitive
3313	Accounting Associate Professionals	preparing financial statements and reports for specified periods;	Non-routine analytical
3313	Accounting Associate Professionals	applying knowledge of bookkeeping principles and practices in order to identify and solve problems arising in the course of their work;	Non-routine analytical
3313	Accounting Associate Professionals	using standard computer software packages to perform accounting and related calculations;	Non-routine analytical
3313	Accounting Associate Professionals	supervising the work of accounts and bookkeeping clerks.	Non-routine interpersonal
3314	Statistical, Mathematical and Related Associate Professionals	(a) assisting in planning and performing statistical, mathematical, actuarial, and related calculations;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(b) preparing detailed estimates of quantities and costs of materials and labour required for statistical census and survey operations;	Non-routine analytical

3314	Statistical, Mathematical and Related Associate Professionals	(c) performing technical tasks connected with establishing, maintaining and using registers and sampling frames for census and survey operations;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(d) performing technical tasks connected with data collection and quality control operations in censuses and surveys;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(e) using standard computer software packages to perform mathematical, actuarial, statistical, accounting and related calculations;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(f) preparing statistical, mathematical, actuarial, accounting and other results for presentation in graphical or tabular form;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(g) 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;	Non-routine analytical
3314	Statistical, Mathematical and Related Associate Professionals	(h) supervising the work of statistical clerks.	Non-routine interpersonal
3315	Valuers and Loss Assessors	(a) determining the quality or value of raw materials, real estate, industrial equipment, personal and household effects, works of art, gems and other objects;	Non-routine analytical
3315	Valuers and Loss Assessors	(b) assessing the extent of damage or loss and liabilities of insurance companies and underwriters for losses covered by insurance policies;	Non-routine analytical

3315	Valuers and Loss Assessors	(c) obtaining records of sales and value of similar items or property;	Routine cognitive
3315	Valuers and Loss Assessors	(d) inspecting items or property to evaluate condition, size and construction;	Routine cognitive
3315	Valuers and Loss Assessors	(e) preparing reports of value, outlining the estimation factors and methods used.	Non-routine analytical
3321	Insurance Representatives	(a) obtaining information about customers' circumstances necessary to determine appropriate type of insurance and conditions;	Routine cognitive
3321	Insurance Representatives	(b) negotiating with customers to determine type and degree of risk for which insurance is required;	Non-routine interpersonal
3321	Insurance Representatives	(c) explaining details of insurance and conditions, risk coverage premiums and benefits to customers;	Non-routine interpersonal
3321	Insurance Representatives	(d) assisting clients to determine the type and level of coverage required, calculating premiums and establishing method of payment;	Non-routine analytical
3321	Insurance Representatives	(e) negotiating and placing reinsurance contracts;	Non-routine interpersonal
3321	Insurance Representatives	(f) advising on, negotiating terms for and placing insurance contracts for large or special types of projects, installations or risks.	Non-routine analytical
3322	Commercial Sales Representatives	(a) soliciting orders and selling goods to retail, industrial, wholesale and other establishments;	Routine cognitive
3322	Commercial Sales Representatives	(b) selling equipment, supplies and related services to business establishments or individuals;	Routine cognitive
3322	Commercial Sales Representatives	(c) obtaining and updating knowledge of market conditions and of employer's	Non-routine analytical

		and competitors' goods and services;	
3322	Commercial Sales Representatives	(d) providing prospective customers with information about the characteristics and functions of the products and equipment for sale, and demonstrating its use or qualities;	Non-routine interpersonal
3322	Commercial Sales Representatives	(e) quoting prices and credit terms, recording orders and arranging deliveries;	Routine cognitive
3322	Commercial Sales Representatives	(f) reporting customers' reactions and requirements to suppliers and manufacturers;	Routine cognitive
3322	Commercial Sales Representatives	(g) following up clients to ensure satisfaction with products purchased.	Routine cognitive
3323	Buyers	(a) determining or negotiating contract terms and conditions, awarding supplier contracts or recommending contract awards for the purchase of equipment, raw materials, products, services and merchandise for resale;	Non-routine interpersonal
3323	Buyers	(b) obtaining information about requirements and stock and developing specifications for quantity and quality to be purchased, costs, delivery dates and other contract conditions;	Non-routine analytical
3323	Buyers	(c) purchasing general and specialized equipment, materials or business services for use or for further processing by their establishment;	Non-routine interpersonal
3323	Buyers	(d) inviting tenders, consulting with suppliers and reviewing quotations;	Non-routine interpersonal
3323	Buyers	(e) purchasing merchandise for resale by retail or wholesale establishments;	Non-routine interpersonal

3323	Buyers	(f) studying market reports, trade periodicals and sales promotion materials and visiting trade shows, showrooms, factories and product design events;	Non-routine analytical
3323	Buyers	(g) selecting the merchandise or products that best fit the establishment's requirements;	Routine cognitive
3323	Buyers	(h) interviewing suppliers and negotiating prices, discounts, credit terms and transportation arrangements;	Non-routine interpersonal
3323	Buyers	(i) overseeing distribution of merchandise to outlets and maintaining adequate stock levels;	Non-routine interpersonal
3323	Buyers	(j) establishing delivery schedules, monitoring progress and contacting clients and suppliers to resolve problems.	Routine cognitive
3331	Clearing and Forwarding Agents	(a) carrying out customs clearance procedures for exports or imports;	Routine cognitive
3331	Clearing and Forwarding Agents	(b) ensuring that insurance is in order;	Routine cognitive
3331	Clearing and Forwarding Agents	(c) ensuring that export/import licences and other formalities are in order;	Routine cognitive
3331	Clearing and Forwarding Agents	(d) signing and issuing bills of lading;	Routine cognitive
3331	Clearing and Forwarding Agents	(e) checking import/export documentation to determine cargo contents, and classifying goods into different fee or tariff groups, using a tariff coding system.	Routine cognitive
3332	Conference and Event Planners	promoting conferences, conventions and trade shows to potential customers;	Non-routine interpersonal

3332	Conference and Event Planners	responding to inquiries concerning services provided and costs for room and equipment hire, catering and related services;	Routine cognitive
3332	Conference and Event Planners	meeting with clients to discuss their needs and outlining package options to meet these needs;	Non-routine interpersonal
3332	Conference and Event Planners	arranging and coordinating services such as conference facilities, catering, signage, displays, audiovisual and computer equipment, accommodation, transport and social events for participants, and logistical arrangements for presenters;	Non-routine interpersonal
3332	Conference and Event Planners	organizing registration of participants;	Non-routine interpersonal
3332	Conference and Event Planners	negotiating the type and costs of services to be provided within budget;	Non-routine interpersonal
3332	Conference and Event Planners	overseeing work by contractors and reporting on variations to work orders.	Non-routine interpersonal
3334	Real Estate Agents and Property Managers	(a) obtaining information about properties to be sold or leased, the circumstances of their owner and the needs of prospective buyers or tenants;	Routine cognitive
3334	Real Estate Agents and Property Managers	(b) showing properties to be sold or leased to prospective buyers or tenants and explaining terms of sale or conditions of rent or lease;	Routine cognitive
3334	Real Estate Agents and Property Managers	(c) facilitating negotiations with tenants and owners on rents and fees;	Non-routine interpersonal
3334	Real Estate Agents and Property Managers	(d) drawing up leasing and sale agreements and estimating costs;	Non-routine analytical



3334	Real Estate Agents and Property Managers	(e) arranging signing of lease agreements and transfer of property rights;	Non-routine interpersonal
3334	Real Estate Agents and Property Managers	(f) collecting rent and bond monies on behalf of owners and inspecting properties before, during and after tenancies;	Non-routine interpersonal
3334	Real Estate Agents and Property Managers	(g) ensuring the availability of workers to perform maintenance of the properties.	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(a) obtaining information about services to be sold and needs of prospective buyers;	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(b) negotiating contracts on behalf of seller or buyer and explaining terms of sale and payment to client;	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(c) signing agreements on behalf of seller or buyer and ensuring that the contract is honoured;	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(d) making sure that the business service purchased is made available to the buyer in the agreed format at the agreed time;	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(e) selling by auction various kinds of property, cars, commodities, livestock, art, jewellery and other objects.	Routine cognitive
3339	Business Services Agents Not Elsewhere Classified	(f) organizing group tours for business or vacation travel and making bulk travel and accommodation bookings.	Non-routine interpersonal

3341	Office Supervisors	(a) coordinating, assigning and reviewing the work of clerks engaged in the following duties: word processing, record keeping and filing, operating telephones and switchboards; data entry, desktop publishing and other activities involving general office and administrative skills;	Non-routine interpersonal
3341	Office Supervisors	(b) establishing work schedules and procedures and coordinating activities with other work units or departments;	Non-routine interpersonal
3341	Office Supervisors	(c) resolving work-related problems and preparing and submitting progress and other reports;	Non-routine interpersonal
3341	Office Supervisors	(d) training and instructing employees in job duties, safety procedures and company policies, or arranging for training to be provided;	Non-routine interpersonal
3341	Office Supervisors	(e) evaluating employees' job performance and conformity with regulations, and recommending appropriate personnel action;	Non-routine analytical
3341	Office Supervisors	(f) assisting in recruitment, interviewing and selection of employees.	Non-routine interpersonal
3342	Legal Secretaries	(a) preparing and processing legal documents and papers, such as deeds, wills, affidavits and briefs;	Routine cognitive
3342	Legal Secretaries	(b) reviewing and proofreading documents and correspondence to ensure compliance with legal procedures;	Routine cognitive
3342	Legal Secretaries	(c) mailing, faxing or arranging for delivery of legal correspondence to clients, witnesses and court officials;	Routine cognitive

3342	Legal Secretaries	(d) organizing and maintaining documents, case files and law libraries;	Routine cognitive
3342	Legal Secretaries	(e) screening requests for meetings, scheduling and organizing meetings;	Routine cognitive
3342	Legal Secretaries	(f) assisting in the preparation of budgets, monitoring of expenditures, drafting of contracts and purchasing or acquisition orders;	Routine cognitive
3342	Legal Secretaries	(g) supervising the work of office support workers.	Non-routine interpersonal
3343	Administrative and Executive Secretaries	(a) drafting administrative correspondence and minutes;	Routine cognitive
3343	Administrative and Executive Secretaries	(b) obtaining, proposing and monitoring deadlines and follow-up dates;	Routine cognitive
3343	Administrative and Executive Secretaries	(c) screening requests for meetings, scheduling and organizing meetings and travel arrangements;	Routine cognitive
3343	Administrative and Executive Secretaries	(d) assisting in the preparation of budgets, monitoring of expenditures, drafting of contracts and purchasing or acquisition orders;	Routine cognitive
3343	Administrative and Executive Secretaries	(e) liaising with other staff about a range of matters relating to the organization's operations;	Non-routine interpersonal
3343	Administrative and Executive Secretaries	(f) writing and answering business or technical letters and other similar correspondence;	Routine cognitive
3343	Administrative and Executive Secretaries	(g) preparing verbatim reports of proceedings in legislative assemblies, courts of law or other places, using shorthand or specialized office equipment.	Routine cognitive
3343	Administrative and Executive Secretaries	(h) supervising the work of clerical support workers.	Non-routine interpersonal

3344	Medical Secretaries	(a) scheduling and confirming medical appointments and communicating messages for medical staff and patients;	Routine cognitive
3344	Medical Secretaries	(b) compiling, recording and reviewing medical charts, reports, documents and correspondence;	Routine cognitive
3344	Medical Secretaries	(c) interviewing patients to complete forms, documents and case histories;	Non-routine interpersonal
3344	Medical Secretaries	(d) completing insurance and other claims forms;	Routine cognitive
3344	Medical Secretaries	(e) maintaining medical files and records and technical library;	Routine cognitive
3344	Medical Secretaries	(f) preparing financial statements and billing procedures;	Non-routine analytical
3344	Medical Secretaries	(g) assisting in the preparation of budgets, drafting of contracts and purchasing or acquisition orders;	Non-routine analytical
3344	Medical Secretaries	(h) supervising the work of office support workers and other office staff.	Non-routine interpersonal
3351	Customs and Border Inspectors	(a) 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;	Non-routine manual physical
3351	Customs and Border Inspectors	(b) checking travel documents of persons crossing national borders to ensure that they have the necessary authorizations and certificates;	Routine cognitive
3351	Customs and Border Inspectors	(c) 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;	Routine cognitive

3351	Customs and Border Inspectors	(d) 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;	Routine cognitive
3351	Customs and Border Inspectors	(e) detaining persons and seizing prohibited and undeclared goods found to be in violation of immigration and customs laws;	Routine manual
3351	Customs and Border Inspectors	(f) coordinating and cooperating with other agencies involved in law enforcement, deportation and prosecution;	Non-routine interpersonal
3351	Customs and Border Inspectors	(g) performing related administrative tasks to record findings, transactions, violations and determinations;	Routine cognitive
3351	Customs and Border Inspectors	(h) when necessary, testifying in a court of law about the circumstances and results of investigations carried out.	Non-routine analytical
3352	Government Tax and Excise Officials	(a) advising organizations, enterprises and the public on government laws, rules and regulations concerning the determination and payment of taxes, duties and other government fees, and on the public's rights and obligations;	Non-routine analytical
3352	Government Tax and Excise Officials	(b) examining tax returns, bills of sale and other relevant documents to determine types and amounts of taxes, duties and other types of fees to be paid;	Non-routine analytical

3352	Government Tax and Excise Officials	(c) investigating filed tax returns and accounting records, systems and internal controls of organizations to ensure compliance with taxation laws and regulations;	Non-routine analytical
3352	Government Tax and Excise Officials	(d) performing related administrative tasks to document findings, maintain records and report on actions taken for cases.	Routine cognitive
3355	Police Inspectors and Detectives	(a) establishing contacts and sources of information about crimes planned or committed, in order to prevent crimes or identify suspected offenders;	Non-routine interpersonal
3355	Police Inspectors and Detectives	(b) obtaining and verifying evidence by examining crime and accident scenes for clues and physical evidence, interviewing witnesses and suspects and analysing documents and computer files;	Non-routine analytical
3355	Police Inspectors and Detectives	(c) analysing evidence in order to solve crimes, identify criminal activity and gather information for court cases;	Non-routine analytical
3355	Police Inspectors and Detectives	(d) establishing contacts and sources of information not readily available or apparent concerning establishments or the circumstances and behaviour of persons, usually with the aim of preventing a crime;	Non-routine interpersonal
3355	Police Inspectors and Detectives	(e) making arrests;	Non-routine manual physical
3355	Police Inspectors and Detectives	(f) testifying in courts of law or reporting to superiors about circumstances and results of investigations.	Non-routine analytical

3359	Government Regulatory Associate Professionals Not Elsewhere Classified	(a) examining places of business to ensure the use of correct weights and measures in trade;	Routine cognitive
3359	Government Regulatory Associate Professionals Not Elsewhere Classified	(b) monitoring price regulations to assess appropriateness of costs for goods and services to protect consumer interests;	Non-routine analytical
3359	Government Regulatory Associate Professionals Not Elsewhere Classified	(c) monitoring wage regulations to ensure appropriate levels of pay for work performed and to assess compliance with employment standards legislation;	Non-routine analytical
3359	Government Regulatory Associate Professionals Not Elsewhere Classified	(d) performing related investigative and administrative tasks to record findings, document compliance problems or inappropriate business practices and to prepare reports and correspondence.	Routine cognitive
3412	Social Work Associate Professionals	(a) collecting information relevant to clients' needs and assessing their relevant skills, strengths and deficits;	Non-routine analytical
3412	Social Work Associate Professionals	(b) helping persons with disabilities or the elderly to obtain services and to improve their ability to function in society;	Non-routine interpersonal
3412	Social Work Associate Professionals	(c) assisting clients to identify options and develop plans of action, while providing necessary support and assistance;	Non-routine interpersonal

3412	Social Work Associate Professionals	(d) 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;	Non-routine interpersonal
3412	Social Work Associate Professionals	(e) counselling clients living in group homes and half-way houses, supervising their activities and assisting in pre-release and release planning;	Non-routine interpersonal
3412	Social Work Associate Professionals	(f) participating in the selection and admission of clients to appropriate programmes;	Non-routine analytical
3412	Social Work Associate Professionals	(g) providing crisis intervention and emergency shelter services;	Non-routine analytical
3412	Social Work Associate Professionals	(h) 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;	Non-routine analytical
3412	Social Work Associate Professionals	(i) assisting in evaluating the effectiveness of interventions and programmes by monitoring and reporting on clients' progress;	Non-routine analytical
3412	Social Work Associate Professionals	(j) 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.	Non-routine interpersonal
3413	Religious Associate Professionals	(a) undertaking religious works;	Non-routine interpersonal



3413	Religious Associate Professionals	(b) preaching and propagating the teachings of a particular religious faith;	Non-routine interpersonal
3413	Religious Associate Professionals	(c) assisting at services of public worship and religious rites;	Non-routine interpersonal
3413	Religious Associate Professionals	(d) providing religious education, spiritual guidance and moral support to individuals and communities;	Non-routine interpersonal
3413	Religious Associate Professionals	(e) administering and participating in programmes to provide food, clothing and shelter to those in need;	Routine cognitive
3413	Religious Associate Professionals	(f) advising communities and individuals on proper behaviour and faith to preserve or improve well-being.	Non-routine analytical
3421	Athletes and Sports Players	(a) participating in competitive sporting events;	Non-routine interpersonal
3421	Athletes and Sports Players	(b) participating in regular practice and training sessions and undertaking private training to maintain the required standard of fitness and skill;	Non-routine manual physical
3421	Athletes and Sports Players	(c) undertaking sports promotional activities and media interviews;	Non-routine interpersonal
3421	Athletes and Sports Players	(d) maintaining a high degree of expertise in a particular sport;	Non-routine manual physical
3421	Athletes and Sports Players	(e) deciding on strategies in consultation with coaches;	Non-routine analytical
3421	Athletes and Sports Players	(f) assessing other competitors and conditions at venues;	Non-routine analytical
3421	Athletes and Sports Players	(g) competing in sporting events;	Non-routine interpersonal
3421	Athletes and Sports Players	(h) adhering to the rules and regulations associated with a specific sport.	Routine cognitive

3422	Sports Coaches, Instructors and Officials	(a) identifying strengths and weaknesses of athletes or teams;	Non-routine analytical
3422	Sports Coaches, Instructors and Officials	(b) planning, developing and implementing training and practice sessions;	Non-routine interpersonal
3422	Sports Coaches, Instructors and Officials	(c) developing, planning and coordinating competitive schedules and programmes;	Non-routine interpersonal
3422	Sports Coaches, Instructors and Officials	(d) motivating and preparing athletes or teams for competitive events or games;	Non-routine interpersonal
3422	Sports Coaches, Instructors and Officials	(e) formulating competitive strategy, developing game plans and directing athletes and players during games or athletic events;	Non-routine analytical
3422	Sports Coaches, Instructors and Officials	(f) analysing and evaluating athletes' or teams' performances and modifying training programmes;	Non-routine analytical
3422	Sports Coaches, Instructors and Officials	(g) monitoring and analysing technique and performance, and determining how future improvements can be made;	Non-routine analytical
3422	Sports Coaches, Instructors and Officials	(h) officiating at sporting events or athletic competitions to maintain standards of play and to ensure that game rules and safety regulations are observed;	Routine cognitive
3422	Sports Coaches, Instructors and Officials	(i) recording lapsed time and keeping score during events or competitions;	Routine cognitive
3422	Sports Coaches, Instructors and Officials	(j) judging the performance of competitors, awarding points, imposing penalties for infractions and determining results;	Non-routine analytical
3422	Sports Coaches, Instructors and Officials	(k) compiling scores and other athletic records.	Routine cognitive

3431	Photographers	taking photographs for advertising or other commercial, industrial or scientific purposes and to illustrate stories and articles in newspapers, magazines and other publications;	Non-routine manual physical
3431	Photographers	taking portrait photographs of persons and groups of persons;	Non-routine manual physical
3431	Photographers	studying requirements of a particular assignment and decide on type of camera, film, lighting and background accessories to be used;	Non-routine analytical
3431	Photographers	determining picture composition, making technical adjustments to equipment and photograph subject;	Non-routine analytical
3431	Photographers	operating scanners to transfer photographic images to computers;	Routine manual
3431	Photographers	operating computers to manipulate photographic images;	Routine manual
3431	Photographers	adapting existing photographic images to create new digitized images to be included in multimedia products;	Non-routine analytical
3431	Photographers	using airbrush, computer or other techniques to create the desired visual effect.	Non-routine manual physical
3432	Interior Designers and Decorators	(a) determining the objectives and constraints of the design brief by consulting with clients and stakeholders;	Non-routine analytical
3432	Interior Designers and Decorators	(b) researching and analysing spatial, functional, efficiency, safety and aesthetic requirements;	Non-routine analytical
3432	Interior Designers and Decorators	(c) formulating design concepts for the interiors of buildings;	Non-routine analytical
3432	Interior Designers and Decorators	(d) preparing sketches, diagrams, illustrations and	Non-routine analytical

		plans to communicate design concepts;	
3432	Interior Designers and Decorators	(e) negotiating design solutions with clients, management, suppliers and construction staff;	Non-routine interpersonal
3432	Interior Designers and Decorators	(f) selecting, specifying and recommending functional and aesthetic materials, furniture and products for interiors;	Non-routine analytical
3432	Interior Designers and Decorators	(g) detailing and documenting selected design for construction;	Non-routine analytical
3432	Interior Designers and Decorators	(h) coordinating the construction and the decoration of interiors;	Non-routine interpersonal
3432	Interior Designers and Decorators	(i) designing and painting stage scenery;	Non-routine analytical
3432	Interior Designers and Decorators	(j) designing and decorating show windows and other display areas to promote products and services.	Non-routine analytical
3434	Chefs	planning and developing recipes and menus, estimating food and labour costs, and ordering food supplies;	Non-routine analytical
3434	Chefs	monitoring quality of dishes at all stages of preparation and presentation;	Non-routine analytical
3434	Chefs	discussing food preparation issues with managers, dieticians, kitchen and waiting staff;	Non-routine interpersonal
3434	Chefs	supervising and coordinating the activities of cooks and other workers engaged in food preparation;	Non-routine interpersonal
3434	Chefs	inspecting supplies, equipment and work areas to ensure conformity with established standards;	Routine cognitive

3434	Chefs	determining how food should be presented, and creating decorative food displays;	Non-routine analytical
3434	Chefs	instructing cooks and other workers in the preparation, cooking, garnishing and presentation of food;	Non-routine interpersonal
3434	Chefs	participating in the recruitment of kitchen staff and monitoring their performance;	Non-routine interpersonal
3434	Chefs	preparing, seasoning and cooking speciality foods and complex dishes;	Non-routine manual physical
3434	Chefs	explaining and enforcing hygiene and food safety regulations.	Non-routine interpersonal
3435	Other Artistic and Cultural Associate Professionals	cannot be determined	#N/A
3511	Information and Communications Technology Operations Technicians	(a) operating and controlling peripheral and related computer equipment;	Routine manual
3511	Information and Communications Technology Operations Technicians	(b) entering commands, using computer terminals, and activating controls on computer and peripheral equipment to integrate and operate equipment;	Routine cognitive
3511	Information and Communications Technology Operations Technicians	(c) monitoring systems for equipment failure or errors in performance;	Routine cognitive
3511	Information and Communications Technology Operations Technicians	(d) notifying supervisors or maintenance technicians of equipment malfunctions;	Non-routine interpersonal

3511	Information and Communications Technology Operations Technicians	(e) responding to program error messages by finding and correcting problems, escalating the problem to other staff or terminating the program;	Routine manual
3511	Information and Communications Technology Operations Technicians	(f) reading job set-up instructions to determine equipment to be used, order of use, material such as disks and paper to be loaded, and to control settings;	Routine manual
3511	Information and Communications Technology Operations Technicians	(g) retrieving, separating and sorting program output as needed, and sending data to specified users;	Routine manual
3511	Information and Communications Technology Operations Technicians	(h) loading peripheral equipment, such as printers, with selected materials for operating runs, or overseeing loading of peripheral equipment by peripheral equipment operators.	Non-routine interpersonal
3512	Information and Communications Technology User Support Technicians	(a) answering user inquiries regarding software or hardware operation to resolve problems;	Routine cognitive
3512	Information and Communications Technology User Support Technicians	(b) entering commands and observing system functioning to verify correct operations and detect errors;	Non-routine analytical
3512	Information and Communications Technology User Support Technicians	(c) installing and performing minor repairs to hardware, software or peripheral equipment, following design or installation specifications;	Non-routine manual physical

3512	Information and Communications Technology User Support Technicians	(d) overseeing the daily performance of communications and computer systems;	Non-routine interpersonal
3512	Information and Communications Technology User Support Technicians	(e) setting up equipment for employee use and performing or ensuring proper installation of cables, operating systems or appropriate software;	Routine manual
3512	Information and Communications Technology User Support Technicians	(f) maintaining records of daily data communication transactions, problems and remedial actions taken, or installation activities;	Routine cognitive
3512	Information and Communications Technology User Support Technicians	(g) emulating or reproducing technical problems encountered by users;	Routine cognitive
3512	Information and Communications Technology User Support Technicians	(h) consulting user guides, technical manuals and other documents to research and implement solutions;	Routine cognitive
3512	Information and Communications Technology User Support Technicians	(i) assisting applications programmers, systems developers and other ICT professionals to develop and test ICT products and services.	Routine cognitive
3513	Computer Network and Systems Technicians	operating, maintaining and troubleshooting network systems;	Routine cognitive
3513	Computer Network and Systems Technicians	operating and maintaining data communications systems other than networks;	Routine cognitive

3513	Computer Network and Systems Technicians	assisting users with network and data communications problems;	Routine cognitive
3513	Computer Network and Systems Technicians	identifying areas needing upgraded equipment and software;	Non-routine analytical
3513	Computer Network and Systems Technicians	installing computer hardware, network software, operating system software and applications software;	Routine cognitive
3513	Computer Network and Systems Technicians	performing start up and close down as well as backup and disaster recovery operations for computer networks.	Routine cognitive
3514	Web Technicians	(a) installing, monitoring and supporting the reliability and usability of Internet and Intranet websites or web server hardware or software;	Routine cognitive
3514	Web Technicians	(b) developing and maintaining documentation, policies and instructions, recording operational procedures and system logs;	Routine cognitive
3514	Web Technicians	(c) developing, coordinating, implementing and monitoring security measures;	Non-routine interpersonal
3514	Web Technicians	(d) analysing and making recommendations to enhance performance, including upgrading and acquiring new systems;	Non-routine analytical
3514	Web Technicians	(e) liaising with, and providing guidance to, clients and users;	Non-routine interpersonal
3514	Web Technicians	(f) creating and modifying web pages;	Non-routine analytical
3514	Web Technicians	(g) performing web server backup and recovery operations.	Routine cognitive
3521	Broadcasting and Audiovisual Technicians	controlling equipment to record sound;	Routine manual



3521	Broadcasting and Audiovisual Technicians	controlling equipment to edit and mix image and sound recordings to ensure satisfactory quality and to create special image and sound effects;	Routine manual
3521	Broadcasting and Audiovisual Technicians	applying knowledge of principles and practices of image and sound recording and editing in order to identify and solve problems;	Non-routine analytical
3521	Broadcasting and Audiovisual Technicians	controlling transmitting and broadcast systems and satellite systems for radio and television programmes;	Routine manual
3521	Broadcasting and Audiovisual Technicians	controlling radio communications systems, satellite services and multiplex systems on land, sea or in aircraft;	Routine manual
3521	Broadcasting and Audiovisual Technicians	applying knowledge of principles and practices of broadcasting, telecommunications terminals and transmissions systems in order to identify and solve problems;	Non-routine analytical
3521	Broadcasting and Audiovisual Technicians	making emergency repairs to equipment.	Non-routine manual physical
4110	General Office Clerks	(a) recording, preparing, sorting, classifying and filing information;	Routine cognitive
4110	General Office Clerks	(b) sorting, opening and sending mail;	Routine cognitive
4110	General Office Clerks	(c) photocopying and faxing documents;	Routine cognitive
4110	General Office Clerks	(d) preparing reports and correspondence of a routine nature;	Routine cognitive
4110	General Office Clerks	(e) recording issue of equipment to staff;	Routine cognitive
4110	General Office Clerks	(f) responding to telephone or electronic inquiries or forwarding to appropriate person;	Routine cognitive

4110	General Office Clerks	(g) checking figures, preparing invoices and recording details of financial transactions made;	Routine cognitive
4110	General Office Clerks	(h) transcribing information onto computers, and proofreading and correcting copy.	Routine cognitive
4120	Secretaries (general)	(a) 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;	Routine cognitive
4120	Secretaries (general)	(b) using various computer software packages including spreadsheets to provide administrative support;	Routine cognitive
4120	Secretaries (general)	(c) dealing with incoming or outgoing mail;	Routine cognitive
4120	Secretaries (general)	(d) scanning, recording and distributing mail, correspondence and other documents;	Routine cognitive
4120	Secretaries (general)	(e) screening requests for meetings or appointments and helping to organize meetings;	Routine cognitive
4120	Secretaries (general)	(f) screening and recording staff members' leave and other entitlements;	Routine cognitive
4120	Secretaries (general)	(g) organizing and supervising filing systems;	Routine cognitive
4120	Secretaries (general)	(h) dealing with routine correspondence on their own initiative.	Routine cognitive
4131	Typists and Word Processing Operators	(a) typing written material from rough drafts, corrected copies, voice recordings or shorthand using a computer, word processor or typewriter;	Routine cognitive

4131	Typists and Word Processing Operators	(b) checking completed work for proper spelling, grammar, punctuation and formatting;	Routine cognitive
4131	Typists and Word Processing Operators	(c) gathering and arranging the material to be typed, following instructions;	Routine cognitive
4131	Typists and Word Processing Operators	(d) filing and storing completed documents on computer hard drive or disk, or maintaining a computer filing system to store, retrieve or update documents;	Routine cognitive
4131	Typists and Word Processing Operators	(e) taking dictation and recording other matter in shorthand;	Routine cognitive
4131	Typists and Word Processing Operators	(f) reproducing the spoken word, environmental sounds and song lyrics as captions for cinema and television programming;	Routine cognitive
4131	Typists and Word Processing Operators	(g) transcribing information recorded in shorthand and on sound recording equipment.	Routine cognitive
4132	Data Entry Clerks	(a) receiving and registering invoices, forms, records and other documents for data capture;	Routine cognitive
4132	Data Entry Clerks	(b) entering numerical data, codes and text from source material into computer-compatible storage and processing devices;	Routine cognitive
4132	Data Entry Clerks	(c) verifying accuracy and completeness of data and correcting entered data, if needed;	Routine cognitive
4132	Data Entry Clerks	(d) operating bookkeeping and calculating machines;	Routine cognitive
4132	Data Entry Clerks	(e) importing and exporting data between different	Routine cognitive

		database systems and software.	
4211	Bank Tellers and Related Clerks	(a) processing customer cash deposits and withdrawals, cheques, transfers, bills, credit card payments, money orders, certified cheques and other related banking transactions;	Routine cognitive
4211	Bank Tellers and Related Clerks	(b) crediting and debiting clients' accounts;	Routine cognitive
4211	Bank Tellers and Related Clerks	(c) paying bills and making money transfers on clients' behalf;	Routine cognitive
4211	Bank Tellers and Related Clerks	(d) receiving mail, selling postage stamps and conducting other post office counter business such as bill payments, money transfers and related business;	Routine cognitive
4211	Bank Tellers and Related Clerks	(e) changing money from one currency to another, as requested by clients;	Routine cognitive
4211	Bank Tellers and Related Clerks	(f) making records of all transactions and reconciling them with cash balance.	Routine cognitive
4212	Bookmakers, Croupiers and Related Gaming Workers	(a) determining risks to decide odds and to hedge or refuse bets;	Non-routine analytical
4212	Bookmakers, Croupiers and Related Gaming Workers	(b) preparing and issuing lists of approximate odds;	Routine cognitive
4212	Bookmakers, Croupiers and Related Gaming Workers	(c) distributing cards, rolling dice or spinning a roulette wheel;	Non-routine manual physical
4212	Bookmakers, Croupiers and Related Gaming Workers	(d) explaining and interpreting operating rules of a gambling establishment;	Non-routine analytical

4212	Bookmakers, Croupiers and Related Gaming Workers	(e) announcing winning numbers, paying winners and collecting payments from losers;	Routine cognitive
4213	Pawnbrokers and Money-lenders	(a) evaluating articles offered as pledges, calculating interest, and lending money;	Non-routine analytical
4213	Pawnbrokers and Money-lenders	(b) returning articles when the loan is paid or, in the event of non-payment, selling pledged articles;	Routine cognitive
4213	Pawnbrokers and Money-lenders	(c) lending money as personal loans against success of future harvest and other similar undertakings;	Routine cognitive
4213	Pawnbrokers and Money-lenders	(d) collecting loans when the pledge involved the success of future harvest and other similar undertakings;	Routine cognitive
4213	Pawnbrokers and Money-lenders	(e) keeping a record of items received and money distributed and received.;	Routine cognitive
4214	Debt Collectors and Related Workers	(a) tracing and locating debtors;	Routine cognitive
4214	Debt Collectors and Related Workers	(b) telephoning, visiting or writing to customers to collect money or arrange for later payments;	Non-routine interpersonal
4214	Debt Collectors and Related Workers	(c) preparing reports including amounts collected, and maintaining records and files related to collection work;	Routine cognitive
4214	Debt Collectors and Related Workers	(d) recommending legal action or discontinuation of service when payment cannot be otherwise obtained;	Non-routine interpersonal
4214	Debt Collectors and Related Workers	(e) asking for and collecting charity payments.	Non-routine interpersonal

4221	Travel Consultants and Clerks	obtaining information about the availability, cost and convenience of different types of transport and accommodation, ascertaining customers' requirements and advising them on travel arrangements;	Non-routine analytical
4221	Travel Consultants and Clerks	providing information about local and regional attractions, sightseeing tours, restaurants, arts and entertainment, and providing maps and brochures;	Routine cognitive
4221	Travel Consultants and Clerks	preparing itineraries;	Routine cognitive
4221	Travel Consultants and Clerks	making and confirming reservations for travel, tours and accommodation;	Routine cognitive
4221	Travel Consultants and Clerks	issuing tickets, boarding passes and vouchers;	Routine cognitive
4221	Travel Consultants and Clerks	verifying travel documentation and registering passengers and luggage at check-in and departure;	Routine cognitive
4221	Travel Consultants and Clerks	preparing bills and receiving payments;	Routine cognitive
4222	Contact Centre Information Clerks	dealing with incoming calls and messages from clients, whether to answer queries, handle calls for service or sort out complaints;	Routine cognitive
4222	Contact Centre Information Clerks	identifying requirements and entering events into a computer system;	Routine cognitive
4222	Contact Centre Information Clerks	dispatching tasks to other units, when relevant;	Routine cognitive
4222	Contact Centre Information Clerks	invoicing or handling payments, where necessary;	Routine cognitive

4222	Contact Centre Information Clerks	sending letters, information sheets and other documents to clients;	Routine cognitive
4222	Contact Centre Information Clerks	advising clients of additional products or services.	Non-routine analytical
4224	Hotel Receptionists	maintaining an inventory of rooms available for occupancy, reservations and room assignments;	Routine cognitive
4224	Hotel Receptionists	registering arriving guests, assigning rooms, verifying customers' credit and issuing room keys;	Routine cognitive
4224	Hotel Receptionists	providing information regarding hotel services and services available in the community;	Routine cognitive
4224	Hotel Receptionists	providing information about availability of accommodation and making room reservations;	Routine cognitive
4224	Hotel Receptionists	responding to guests' requests for housekeeping and maintenance services as well as to complaints;	Routine cognitive
4224	Hotel Receptionists	contacting housekeeping or maintenance services when guests report problems;	Routine cognitive
4224	Hotel Receptionists	compiling and checking guest accounts for charges using computerized or manual systems;	Routine cognitive
4224	Hotel Receptionists	receiving and forwarding messages in person or using telephones or telephone switchboards;	Routine cognitive
4224	Hotel Receptionists	reviewing statements of charges to departing guests and receiving payment.	Routine cognitive
4225	Inquiry Clerks	(a) answering inquiries about goods, services and policy and providing information about their availability, location, price and related issues;	Routine cognitive

4225	Inquiry Clerks	(b) responding to inquiries about problems and providing advice, information and assistance;	Routine cognitive
4225	Inquiry Clerks	(c) recording information about inquiries and complaints;	Routine cognitive
4225	Inquiry Clerks	(d) referring complex inquiries to team leaders or expert advisers;	Routine cognitive
4225	Inquiry Clerks	(e) issuing relevant forms, information kits and brochures to interested parties.	Routine cognitive
4226	Receptionists (general)	(a) receiving and welcoming visitors, guests or clients;	Routine cognitive
4226	Receptionists (general)	(b) making appointments for clients;	Routine cognitive
4226	Receptionists (general)	(c) dealing with telephone requests for information or appointments;	Routine cognitive
4226	Receptionists (general)	(d) directing clients to appropriate location or person;	Routine cognitive
4226	Receptionists (general)	(e) supplying information pamphlets, brochures or forms.	Routine cognitive
4229	Client Information Workers Not Elsewhere Classified	(a) interviewing patients to obtain and process information required to provide hospital services;	Non-routine interpersonal
4229	Client Information Workers Not Elsewhere Classified	(b) interviewing applicants for public assistance to gather information pertinent to their application;	Non-routine interpersonal
4229	Client Information Workers Not Elsewhere Classified	(c) verifying the accuracy of information provided;	Routine cognitive
4229	Client Information Workers Not Elsewhere Classified	(d) initiating procedures to grant, modify, deny or terminate assistance;	Routine cognitive



4229	Client Information Workers Not Elsewhere Classified	(e) providing information and answering questions concerning benefits and claims procedures;	Routine cognitive
4229	Client Information Workers Not Elsewhere Classified	(f) referring patients or applicants to other organizations if they are ineligible for services.	Routine cognitive
4311	Accounting and Bookkeeping Clerks	(a) checking figures, postings and documents for correct entry, mathematical accuracy and proper codes;	Routine cognitive
4311	Accounting and Bookkeeping Clerks	(b) operating computers programmed with accounting software to record, store and analyse information;	Routine cognitive
4311	Accounting and Bookkeeping Clerks	(c) classifying, recording and summarizing numerical and financial data to compile and keep financial records, using journals and ledgers or computers;	Routine cognitive
4311	Accounting and Bookkeeping Clerks	(d) calculating, preparing and issuing bills, invoices, account statements and other financial statements according to established procedures.	Non-routine analytical
4311	Accounting and Bookkeeping Clerks	(e) 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.	Routine cognitive
4312	Statistical, Finance and Insurance Clerks	(a) processing insurance enrolments, cancellations, claims transactions, policy changes and payments;	Routine cognitive
4312	Statistical, Finance and Insurance Clerks	(b) obtaining and compiling statistical or actuarial data based on routine or special sources of information;	Routine cognitive

4312	Statistical, Finance and Insurance Clerks	(c) calculating totals, averages, percentages and other details and presenting them in the required tabular form;	Non-routine analytical
4312	Statistical, Finance and Insurance Clerks	(d) preparing financial documents, and calculating interest or brokerage charges and stamp duties payable;	Non-routine analytical
4312	Statistical, Finance and Insurance Clerks	(e) maintaining records of bonds, shares and other securities bought or sold on behalf of clients or employers.	Routine cognitive
4313	Payroll Clerks	(a) maintaining records of employee attendance, leave and overtime to calculate pay and benefit entitlements, using manual or computerized systems;	Routine cognitive
4313	Payroll Clerks	(b) preparing and verifying statements of earnings for employees, indicating gross and net salaries and deductions such as taxes, union dues, garnishments and insurance and pension plans;	Routine cognitive
4313	Payroll Clerks	(c) preparing employee payments and benefit payments by cheque or electronic transfer;	Routine cognitive
4313	Payroll Clerks	(d) reviewing time sheets, work charts, wage computation and other information to detect and reconcile payroll discrepancies;	Routine cognitive
4313	Payroll Clerks	(e) verifying attendance, hours worked and pay adjustments, and posting information into designated records.	Routine cognitive
4321	Stock Clerks	(a) arranging and controlling receipt and dispatch of goods and keeping relevant records;	Routine cognitive

4321	Stock Clerks	(b) maintaining stock records, verifying issue of goods, estimating needs and making requisitions of new stocks;	Routine cognitive
4321	Stock Clerks	(c) receiving, storing and issuing tools, spare parts or various equipment, and maintaining relevant records;	Routine cognitive
4321	Stock Clerks	(d) weighing goods received or produced, or for issue or dispatch, and maintaining relevant records;	Routine cognitive
4321	Stock Clerks	(e) compiling inventories of furniture and other items received for storage.	Routine cognitive
4322	Production Clerks	(a) computing quantities, qualities and types of materials required by production programmes;	Routine cognitive
4322	Production Clerks	(b) preparing production requirements schedules, ensuring that materials are available when needed, and keeping relevant records;	Routine cognitive
4322	Production Clerks	(c) preparing or assisting in the preparation of production operation schedules on the basis of customers' orders and production capacity and performance;	Routine cognitive
4322	Production Clerks	(d) verifying stocks, arranging deliveries and investigating delays;	Routine cognitive
4322	Production Clerks	(e) recording and coordinating the flow of work and materials between departments.	Routine cognitive
4323	Transport Clerks	(a) keeping records of operational aspects and coordinating the timing of passenger and freight transport;	Routine cognitive
4323	Transport Clerks	(b) directing train routings within a division or zone of a railway system and keeping related records;	Routine cognitive

4323	Transport Clerks	(c) directing, controlling and keeping records of freight handling at a railway yard;	Routine cognitive
4323	Transport Clerks	(d) 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;	Routine cognitive
4323	Transport Clerks	(e) coordinating and keeping records of operational activities concerning air transport of passengers and freight, such as passenger lists and freight manifests;	Routine cognitive
4323	Transport Clerks	(f) preparing reports for management.	Routine cognitive
4411	Library Clerks	(a) issuing and receiving library books and other materials;	Routine cognitive
4411	Library Clerks	(b) placing books and other library materials on shelves;	Routine cognitive
4411	Library Clerks	(c) performing clerical activities such as manual and electronic filing, word processing and occasional typing;	Routine cognitive
4411	Library Clerks	(d) maintaining journal subscriptions;	Routine cognitive
4411	Library Clerks	(e) assisting library users in accessing basic library materials and making interlibrary loans;	Non-routine interpersonal
4411	Library Clerks	(f) maintaining library records relating to the acquisition, issue and return of books and other materials.	Routine cognitive
4413	Coding, Proof-reading and Related clerks	(a) converting information into codes and classifying information by codes for data-processing purposes;	Routine cognitive

4413	Coding, Proof-reading and Related clerks	(b) comparing proofs of texts and related material prepared for printing with original material, correcting errors and marking texts for printer according to the established rules;	Routine cognitive
4413	Coding, Proof-reading and Related clerks	(c) sorting forms and marking them with identification numbers;	Routine cognitive
4413	Coding, Proof-reading and Related clerks	(d) sorting documents for filing or to collate sets of pages;	Routine cognitive
4413	Coding, Proof-reading and Related clerks	(e) addressing circulars and envelopes by hand.	Routine cognitive
4415	Filing and Copying Clerks	(a) sorting or classifying materials according to guidelines such as content, purpose, user criteria, or chronological, alphabetical or numerical order;	Routine cognitive
4415	Filing and Copying Clerks	(b) filing material in drawers, cabinets and storage boxes;	Routine cognitive
4415	Filing and Copying Clerks	(c) locating and remove materials from files when requested;	Routine cognitive
4415	Filing and Copying Clerks	(d) keeping records of materials filed and removed;	Routine cognitive
4415	Filing and Copying Clerks	(e) photocopying, scanning or faxing documents.	Routine cognitive
4416	Personnel Clerks	(a) updating information on employment history, salaries, performance evaluations, qualifications and training, and leave taken and accumulated;	Routine cognitive
4416	Personnel Clerks	(b) initiating records for newly appointed workers and checking records for completeness;	Routine cognitive
4416	Personnel Clerks	(c) processing applications for employment and promotions and advising applicants of results;	Routine cognitive

4416	Personnel Clerks	(d) receiving and answering inquiries about employment entitlements and conditions;	Routine cognitive
4416	Personnel Clerks	(e) sending out job applications and announcements of job openings and job examinations;	Routine cognitive
4416	Personnel Clerks	(f) maintaining and updating manual and computerized filing and registration systems, and compiling and preparing reports and documents relating to personnel activities;	Routine cognitive
4416	Personnel Clerks	(g) storing and retrieving personnel records and files on request.	Routine cognitive
4419	Clerical Support Workers Not Elsewhere Classified	(a) receiving customers' orders for classified advertising, writing and editing copy, calculating advertising rates and billing customers;	Routine cognitive
4419	Clerical Support Workers Not Elsewhere Classified	(b) writing business and government correspondence such as replies to requests for information and assistance, damage claims, credit and billing inquiries and service complaints;	Routine cognitive
4419	Clerical Support Workers Not Elsewhere Classified	(c) assisting in the preparation of periodicals, advertisements, catalogues, directories and other material for publication;	Routine cognitive
4419	Clerical Support Workers Not Elsewhere Classified	(d) reading newspapers, magazines, press releases and other publications to locate and file articles of interest to staff and clients.	Routine cognitive
4426			#N/A
5111	Travel Attendants and Travel Stewards	(a) greeting passengers entering aircraft or ships, checking tickets or boarding passes, and directing passengers to their seats or berths;	Non-routine interpersonal

5111	Travel Attendants and Travel Stewards	(b) announcing, explaining and demonstrating safety and emergency procedures such as the use of oxygen masks, seat belts and life jackets;	Routine cognitive
5111	Travel Attendants and Travel Stewards	(c) assembling and serving pre-prepared meals and beverages;	Non-routine manual physical
5111	Travel Attendants and Travel Stewards	(d) selling duty-free and other goods;	Routine cognitive
5111	Travel Attendants and Travel Stewards	(e) taking care of general needs and comfort of passengers, answering inquiries, and keeping cabins clean and tidy;	Non-routine manual physical
5111	Travel Attendants and Travel Stewards	(f) directing and assisting passengers and following prescribed procedures in the event of an emergency, such as evacuating an aircraft following an emergency landing;	Non-routine manual physical
5111	Travel Attendants and Travel Stewards	(g) verifying that first aid kits and other emergency equipment are in working order;	Routine cognitive
5111	Travel Attendants and Travel Stewards	(h) administering first aid to passengers in distress;	Routine cognitive
5111	Travel Attendants and Travel Stewards	(i) attending pre-flight briefings concerning weather, altitudes, routes, emergency procedures, crew coordination, lengths of flights, food and beverage services offered, and numbers of passengers;	Non-routine interpersonal
5111	Travel Attendants and Travel Stewards	(j) preparing passengers and aircraft for take-off and landing;	Non-routine interpersonal
5111	Travel Attendants and Travel Stewards	(k) determining special assistance needs of passengers such as small children, the elderly or disabled persons.	Non-routine interpersonal

5112	Transport Conductors	(a) collecting and issuing tickets, passes or fares, and checking the validity of tickets issued previously;	Routine cognitive
5112	Transport Conductors	(b) attending to sleeping-cars and their occupants on passenger trains;	Non-routine interpersonal
5112	Transport Conductors	(c) providing assistance with boarding, seating and luggage as required, especially to elderly, sick or injured people;	Non-routine manual physical
5112	Transport Conductors	(d) opening and closing doors for passengers;	Routine manual
5112	Transport Conductors	(e) performing equipment safety checks prior to departure;	Routine manual
5112	Transport Conductors	(f) signalling to drivers to stop or proceed;	Routine manual
5112	Transport Conductors	(g) greeting passengers boarding transportation equipment, and announcing routes and stops.	Non-routine interpersonal
5112	Transport Conductors	(h) ensuring that safety regulations are respected;	Routine cognitive
5112	Transport Conductors	(i) responding to passengers' requests and complaints and providing information about stops and connections;	Routine cognitive
5112	Transport Conductors	(j) taking appropriate action in case of emergencies or accidents.	Routine cognitive
5113	Travel Guides	escorting and guiding tourists on cruises and sightseeing tours;	Non-routine interpersonal
5113	Travel Guides	escorting visitors through places of interest such as museums, exhibitions, theme parks, factories and other industrial establishments;	Non-routine interpersonal
5113	Travel Guides	describing and providing information on points of interest and exhibits and responding to questions;	Routine cognitive
5113	Travel Guides	conducting educational activities for schoolchildren;	Non-routine interpersonal



5113	Travel Guides	monitoring visitors' activities to ensure compliance with establishment or tour regulations and safety practices;	Routine cognitive
5113	Travel Guides	greeting and registering visitors and tour participants, and issuing any required identification badges or safety devices;	Non-routine interpersonal
5113	Travel Guides	distributing brochures, showing audiovisual presentations, and explaining procedures and operations at tour sites;	Routine cognitive
5113	Travel Guides	providing for physical safety of groups, and performing activities such as providing first aid and directing emergency evacuations;	Non-routine manual physical
5113	Travel Guides	resolving any problems with tour itineraries, service or accommodation.	Routine cognitive
5113	Travel Guides	escorting and guiding tourists on cruises and sightseeing tours;	Non-routine interpersonal
5113	Travel Guides	escorting visitors through places of interest such as museums, exhibitions, theme parks, factories and other industrial establishments;	Non-routine interpersonal
5113	Travel Guides	describing and providing information on points of interest and exhibits and responding to questions;	Routine cognitive
5113	Travel Guides	conducting educational activities for schoolchildren;	Non-routine interpersonal
5113	Travel Guides	monitoring visitors' activities to ensure compliance with establishment or tour regulations and safety practices;	Routine cognitive
5113	Travel Guides	greeting and registering visitors and tour participants, and issuing any required	Non-routine interpersonal

		identification badges or safety devices;	
5113	Travel Guides	distributing brochures, showing audiovisual presentations, and explaining procedures and operations at tour sites;	Routine cognitive
5113	Travel Guides	providing for physical safety of groups, and performing activities such as providing first aid and directing emergency evacuations;	Non-routine manual physical
5113	Travel Guides	resolving any problems with tour itineraries, service or accommodation.	Routine cognitive
5120	Cooks	planning meals, preparing and cooking foodstuffs;	Non-routine manual physical
5120	Cooks	planning, supervising and coordinating the work of kitchen helpers;	Non-routine interpersonal
5120	Cooks	checking the quality of food;	Non-routine manual physical
5120	Cooks	weighing, measuring and mixing ingredients according to recipes and personal judgement;	Routine cognitive
5120	Cooks	regulating the temperature of ovens, grills, roasters and other cooking equipment; inspecting and cleaning the kitchen, kitchen equipment and serving areas to ensure safe and sanitary food handling practices;	Non-routine manual physical
5120	Cooks	operating large-volume cooking equipment such as grills, deep-fat fryers, or griddles.	Routine manual
5131	Waiters	setting tables with clean linen, cutlery, crockery and glassware;	Non-routine manual physical
5131	Waiters	greeting customers and presenting them with menus and beverage lists;	Non-routine interpersonal

5131	Waiters	advising on food and beverage choices;	Non-routine interpersonal
5131	Waiters	taking orders for food and drinks and passing orders to kitchen or bar staff;	Non-routine interpersonal
5131	Waiters	serving food and beverages to clients at tables;	Non-routine manual physical
5131	Waiters	clearing tables and returning dishes and cutlery to the kitchen;	Non-routine manual physical
5131	Waiters	presenting bills, accepting payment and operating point-of-sales machines and cash registers.	Non-routine manual physical
5132	Bartenders	taking beverage orders from serving staff or directly from patrons;	Non-routine interpersonal
5132	Bartenders	preparing and serving alcoholic and non-alcoholic drinks at a bar;	Non-routine manual physical
5132	Bartenders	washing used glassware, cleaning and maintaining bar service areas, tea- and coffee-making areas and equipment such as espresso machines;	Non-routine manual physical
5132	Bartenders	collecting payment for sales, operating cash registers and balancing cash receipts;	Non-routine manual physical
5132	Bartenders	tapping kegs and attaching supply lines;	Routine manual
5132	Bartenders	assisting in keeping the bar properly stocked and arranging bottles and glasses;	Routine manual
5132	Bartenders	checking identification of customers to verify age requirements for purchase of alcohol;	Routine cognitive
5132	Bartenders	taking steps to limit problems related to excessive drinking, such as persuading customers to stop drinking, declining further service or ordering transportation;	Non-routine interpersonal
5132	Bartenders	mixing ingredients to prepare cocktails and other drinks;	Non-routine manual physical

5132	Bartenders	serving snacks or other food items to customers at the bar.	Non-routine manual physical
5141	Hairdressers	cutting, washing, tinting and waving hair;	Non-routine manual physical
5141	Hairdressers	shaving or trimming beards and moustaches;	Non-routine manual physical
5141	Hairdressers	giving scalp treatments;	Non-routine manual physical
5141	Hairdressers	fitting wigs according to customers' requirements;	Non-routine manual physical
5141	Hairdressers	providing advice on hair care, beauty products and hairstyles;	Non-routine interpersonal
5141	Hairdressers	styling hair into dreadlocks and braids and adding hair extensions;	Non-routine manual physical
5141	Hairdressers	arranging appointments and collecting payments;	Routine cognitive
5141	Hairdressers	cleaning work areas and sanitizing instruments.	Non-routine manual physical
5142	Beauticians and Related Workers	cleaning and applying creams, lotions and related products to face and other parts of the body;	Non-routine manual physical
5142	Beauticians and Related Workers	giving facial and body massage;	Non-routine manual physical
5142	Beauticians and Related Workers	applying make-up to clients of a beauty parlour or to actors and other performers;	Non-routine manual physical
5142	Beauticians and Related Workers	cleaning, shaping and polishing finger- and toenails and treating ailments of the human foot such as corns, calluses or deformed toenails;	Non-routine manual physical
5142	Beauticians and Related Workers	attending to clients taking baths and administering elementary massage;	Non-routine manual physical
5142	Beauticians and Related Workers	using waxing, sugaring and depilation techniques to remove unwanted bodily hair;	Non-routine manual physical
5142	Beauticians and Related Workers	advising clients on diet and exercise to assist in weight loss and slimming;	Non-routine analytical

5142	Beauticians and Related Workers	arranging appointments and collecting payments.	Routine cognitive
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	engaging, training, discharging, organizing and supervising helpers, cleaners and other housekeeping staff;	Non-routine interpersonal
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	purchasing or controlling the purchase of supplies;	Non-routine interpersonal
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	controlling storage and issue of supplies;	Routine cognitive
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	supervising general welfare and conduct of individuals in institutions;	Non-routine interpersonal
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures;	Non-routine manual physical
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	making beds, cleaning bathrooms, supplying towels, soap and related items;	Non-routine manual physical

5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	cleaning kitchens and generally helping with kitchen work, including dishwashing;	Non-routine manual physical
5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments	restocking mini-bars and replenishing items such as drinking glasses and writing equipment.	Non-routine manual physical
5152	Domestic Housekeepers	(a) supervising workers employed in households as domestic staff;	Non-routine interpersonal
5152	Domestic Housekeepers	(b) purchasing or controlling the purchase of supplies;	Non-routine interpersonal
5152	Domestic Housekeepers	(c) controlling storage and issue of supplies;	Routine cognitive
5152	Domestic Housekeepers	(d) assisting in cases of minor injury or illness by performing tasks such as taking temperature, giving medicine, putting on bandages;	Non-routine manual physical
5152	Domestic Housekeepers	(e) sweeping or vacuum-cleaning, washing and polishing floors, furniture and other fixtures.	Non-routine manual physical
5152	Domestic Housekeepers	(f) making beds, cleaning bathrooms, supplying towels, soap and related items;	Non-routine manual physical
5152	Domestic Housekeepers	(g) taking care of household pets and plants, receiving visitors, answering telephones, delivering messages and shopping for groceries;	Non-routine manual physical
5152	Domestic Housekeepers	(h) preparing and cooking meals, setting and clearing tables and serving food and beverages;	Non-routine manual physical
5152	Domestic Housekeepers	(i) cleaning kitchens and generally helping with kitchen work, including dishwashing.	Non-routine manual physical

5153	Building Caretakers	(a) supervising the work of cleaning, housekeeping and building maintenance staff and contractors;	Non-routine interpersonal
5153	Building Caretakers	(b) participating in cleaning, simple repairs and maintenance of building interiors;	Non-routine manual physical
5153	Building Caretakers	(c) tending furnaces and boilers to ensure provision of heat and hot water;	Non-routine manual physical
5153	Building Caretakers	(d) regulating conduct of tenants and visitors in such matters as noise abatement or misuse of property;	Non-routine interpersonal
5153	Building Caretakers	(e) providing small services to absent tenants such as accepting deliveries on their behalf or providing requested information to callers;	Non-routine manual physical
5153	Building Caretakers	(f) notifying management and owners of buildings of the need for major repairs;	Non-routine interpersonal
5153	Building Caretakers	(g) patrolling buildings to ensure security is maintained;	Non-routine manual physical
5153	Building Caretakers	(h) filling out registration forms and providing tenants with copies of rules.	Routine cognitive
5163	Undertakers and Embalmers	(a) making arrangements for and conducting funerals, cremations and burials;	Non-routine interpersonal
5163	Undertakers and Embalmers	(b) embalming human remains to retard or arrest the process of decay;	Non-routine manual physical
5163	Undertakers and Embalmers	(c) conforming to health and sanitation and ensuring that legal requirements concerning embalming are met;	Routine cognitive
5163	Undertakers and Embalmers	(d) incising and closing incisions on various parts of the body and reshaping or reconstructing disfigured or maimed human remains when necessary;	Non-routine manual physical
5163	Undertakers and Embalmers	(e) dressing human bodies and placing them in caskets;	Non-routine manual physical

5163	Undertakers and Embalmers	(f) 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.	Non-routine interpersonal
5169	Personal Services Workers Not Elsewhere Classified	(a) accompanying clients to restaurants and other outings;	Non-routine interpersonal
5169	Personal Services Workers Not Elsewhere Classified	(b) acting as a dancing partner;	Non-routine interpersonal
5169	Personal Services Workers Not Elsewhere Classified	(c) welcoming clients to a night-club and ensuring that they are entertained well.	Routine cognitive
5211	Stall and Market Salespersons	(a) obtaining permission to set up a stand at a particular place in streets, markets or other open spaces;	Non-routine interpersonal
5211	Stall and Market Salespersons	(b) determining product mix, stock and price levels for goods to be sold;	Non-routine analytical
5211	Stall and Market Salespersons	(c) buying or contracting a regular supply of goods to be sold from wholesale suppliers or directly from producers;	Routine cognitive
5211	Stall and Market Salespersons	(d) erecting and dismantling stalls and stands, and transporting, storing, loading and unloading goods for sale;	Non-routine manual physical
5211	Stall and Market Salespersons	(e) demonstrating and selling goods and accepting payment;	Routine cognitive
5211	Stall and Market Salespersons	(f) stacking and displaying goods for sale, and wrapping and packing goods sold;	Routine manual



5211	Stall and Market Salespersons	(g) keeping accounts and maintaining a record of stock levels.	Routine cognitive
5212	Street Food Salespersons	(a) obtaining permission or a licence, where required, to sell food and drinks on the street or in a public place;	Routine cognitive
5212	Street Food Salespersons	(b) obtaining food and drinks for sale;	Non-routine manual physical
5212	Street Food Salespersons	(c) preparing, either beforehand or on the spot, food and drinks for sale;	Non-routine manual physical
5212	Street Food Salespersons	(d) loading and unloading, pushing, pedalling or carrying handcarts, trucks, trays or baskets to bring food and drinks to the desired place in the street, or to public places such as stations or cinemas;	Non-routine manual physical
5212	Street Food Salespersons	(e) displaying and selling food and drinks and accepting payment.	Routine cognitive
5221	Shopkeepers	(a) determining product mix, stock and price levels for goods to be sold;	Non-routine analytical
5221	Shopkeepers	(b) purchasing and ordering goods for sale from markets, wholesalers and other suppliers;	Non-routine interpersonal
5221	Shopkeepers	(c) budgeting and maintaining records of stock levels and financial transactions;	Non-routine analytical
5221	Shopkeepers	(d) determining prices and displaying goods for sale;	Non-routine analytical
5221	Shopkeepers	(e) selling goods to customers and advising them on product use;	Routine cognitive
5221	Shopkeepers	(f) examining returned goods and deciding on appropriate action;	Routine cognitive
5221	Shopkeepers	(g) taking inventory of goods in stock.	Routine cognitive
5222	Shop Supervisors	(a) planning and preparing work schedules and assigning staff to specific duties;	Non-routine analytical

5222	Shop Supervisors	(b) instructing staff on sales procedures, including how to handle difficult or complex cases;	Non-routine interpersonal
5222	Shop Supervisors	(c) ensuring that customers receive prompt service;	Routine cognitive
5222	Shop Supervisors	(d) participating in and providing advice to managers on interviewing, hiring, training, evaluating, promoting and dismissing staff, and resolving staff grievances;	Non-routine interpersonal
5222	Shop Supervisors	(e) examining returned goods and deciding on appropriate action;	Routine cognitive
5222	Shop Supervisors	(f) taking inventory of goods for sale and ordering new stock;	Routine cognitive
5222	Shop Supervisors	(g) ensuring that goods and services are correctly priced and displayed;	Routine cognitive
5222	Shop Supervisors	(h) ensuring that safety procedures are enforced.	Routine cognitive
5223	Shop Sales Assistants	(a) determining customer requirements and advising on product range, price, delivery, warranties and product use and care;	Non-routine analytical
5223	Shop Sales Assistants	(b) demonstrating and explaining to customers the establishment's goods and services;	Non-routine interpersonal
5223	Shop Sales Assistants	(c) selling goods and services, accepting payment by a variety of payment methods, preparing sales invoices and recording sales using cash registers;	Routine cognitive
5223	Shop Sales Assistants	(d) assisting with the ongoing management of stock such as product inventories, and participating in stock takes;	Routine cognitive
5223	Shop Sales Assistants	(e) stacking and displaying goods for sale, and wrapping and packing goods sold.	Routine manual

5230	Cashiers and Ticket Clerks	(a) receiving and verifying payment by cash, cheque, credit card or automatic debit in stores, ticket offices or similar establishments;	Routine cognitive
5230	Cashiers and Ticket Clerks	(b) giving change and issuing receipts;	Routine cognitive
5230	Cashiers and Ticket Clerks	(c) issuing tickets for attendance at sporting and cultural events;	Routine cognitive
5230	Cashiers and Ticket Clerks	(d) counting and recording money received or paid out and balancing against cash register sales records;	Routine cognitive
5230	Cashiers and Ticket Clerks	(e) receiving incoming cash, checking it against sales slips and other documents, and preparing it for deposit at a financial institution	Routine cognitive
5230	Cashiers and Ticket Clerks	(f) operating cash registers to calculate totals to be paid from or to clients;	Routine cognitive
5230	Cashiers and Ticket Clerks	(g) scanning, weighing and recording prices of goods;	Routine cognitive
5230	Cashiers and Ticket Clerks	(h) wrapping and placing merchandise in bags.	Routine manual
5242	Sales Demonstrators	(a) 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;	Routine cognitive
5242	Sales Demonstrators	(b) answering questions and offering advice on the use of goods;	Non-routine interpersonal
5242	Sales Demonstrators	(c) selling goods or directing customers to sales staff;	Routine cognitive
5242	Sales Demonstrators	(d) taking orders and making arrangements for payment, delivery and collection of goods;	Routine cognitive
5242	Sales Demonstrators	(e) offering sample goods and distributing catalogues and advertising material.	Non-routine interpersonal

5243	Door-to-door Salespersons	(a) giving details of various goods or services and of terms of sale by visiting clients and potential clients in private homes;	Non-routine interpersonal
5243	Door-to-door Salespersons	(b) demonstrating or describing goods or services on offer;	Non-routine interpersonal
5243	Door-to-door Salespersons	(c) recording orders and transactions and placing orders received with suppliers;	Routine cognitive
5243	Door-to-door Salespersons	(d) preparing invoices and sales contracts and accepting payment;	Routine cognitive
5243	Door-to-door Salespersons	(e) distributing letters, information sheets and other documents to clients;	Routine cognitive
5243	Door-to-door Salespersons	(f) compiling lists of prospective clients and calling on them to obtain new business;	Routine cognitive
5243	Door-to-door Salespersons	(g) travelling between sales areas and clients and transporting samples or goods for sale.	Non-routine manual physical
5244	Contact Centre Salespersons	promoting goods and services by telephone or electronic mail, following scripts and working from lists of contacts;	Non-routine interpersonal
5244	Contact Centre Salespersons	creating interest in goods and services, and seeking a sale or an agreement to see sales representatives;	Non-routine interpersonal
5244	Contact Centre Salespersons	arranging processing and dispatch of goods and services, information kits and brochures to customers;	Non-routine interpersonal
5244	Contact Centre Salespersons	arranging appointments for sales representatives;	Non-routine interpersonal
5244	Contact Centre Salespersons	recording notes for follow-up action and updating marketing databases to reflect changes to the status of each customer;	Routine cognitive

5244	Contact Centre Salespersons	reporting competitor activities and issues raised by contacts for attention by managers;	Non-routine interpersonal
5244	Contact Centre Salespersons	maintaining statistics of calls made and successes achieved;	Routine cognitive
5244	Contact Centre Salespersons	submitting periodic reports on telemarketing activities and results.	Routine cognitive
5245	Service Station Attendants	(a) filling fuel tanks and containers to level specified by customer;	Non-routine manual physical
5245	Service Station Attendants	(b) checking and replenishing air pressure in vehicle tyres, oil and other vehicle fluid levels;	Non-routine manual physical
5245	Service Station Attendants	(c) washing vehicle windscreens and windows;	Non-routine manual physical
5245	Service Station Attendants	(d) performing minor repair work to vehicles such as replacing tyres, light bulbs and windscreen wiper blades;	Non-routine manual physical
5245	Service Station Attendants	(e) maintaining and operating automatic car wash facilities;	Routine manual
5245	Service Station Attendants	(f) collecting payments from customers for purchases;	Routine cognitive
5245	Service Station Attendants	(g) cleaning petrol pumps and surrounding driveways, shops and facilities;	Non-routine manual physical
5245	Service Station Attendants	(h) undertaking stock control and preparing reports on fuel, oil, accessories and other items sold.	Routine cognitive
5246	Food Service Counter Attendants	(a) serving food to customers at counters;	Non-routine manual physical
5246	Food Service Counter Attendants	(b) ascertaining the products desired by customers, assisting them in making choices and taking orders;	Non-routine interpersonal
5246	Food Service Counter Attendants	(c) cleaning, peeling, slicing and trimming foodstuffs, using manual and electric appliances;	Non-routine manual physical

5246	Food Service Counter Attendants	(d) preparing simple food items and reheating prepared meals;	Non-routine manual physical
5246	Food Service Counter Attendants	(e) portioning and wrapping food or placing it directly on plates for service to patrons;	Routine manual
5246	Food Service Counter Attendants	(f) packaging takeaway food;	Routine manual
5246	Food Service Counter Attendants	(g) stocking refrigerators, salad and buffet bars and keeping records of the quantities of food used;	Routine manual
5246	Food Service Counter Attendants	(h) receiving payment for food items purchased.	Routine cognitive
5249	Sales Workers Not Elsewhere Classified	cannot be determined	#N/A
5311	Child Care Workers	(a) assisting children to wash, dress and feed themselves;	Non-routine interpersonal
5311	Child Care Workers	(b) taking children to and from school or outdoors for recreation;	Non-routine interpersonal
5311	Child Care Workers	(c) playing games with children, or entertaining them by reading or storytelling;	Routine cognitive
5311	Child Care Workers	(d) assisting in the preparation of materials and equipment for children's education and recreational activities;	Routine cognitive
5311	Child Care Workers	(e) managing children's behaviour and guiding their social development;	Non-routine interpersonal
5311	Child Care Workers	(f) disciplining children and recommending or initiating other measures to control behaviour, such as caring for own clothing and picking up toys and books;	Non-routine interpersonal
5311	Child Care Workers	(g) observing and monitoring children's play activities;	Non-routine analytical

5311	Child Care Workers	(h) keeping records on individual children, including daily observations and information about activities, meals served and medications administered.	Routine cognitive
5312	Teachers' Aides	(a) demonstrating, supervising and participating in activities that enhance the physical, social, emotional and intellectual development of children in schools and pre-schools;	Non-routine interpersonal
5312	Teachers' Aides	(b) preparing indoor and outdoor areas for learning and recreational activities;	Non-routine interpersonal
5312	Teachers' Aides	(c) assisting children with intellectual, physical, behavioural and other learning difficulties with their studies;	Non-routine interpersonal
5312	Teachers' Aides	(d) assisting children individually to learn social skills;	Non-routine interpersonal
5312	Teachers' Aides	(e) assisting with preparing teaching materials, and copying and collating written and printed material;	Routine cognitive
5312	Teachers' Aides	(f) operating audiovisual equipment, computers and other teaching aides;	Routine manual
5312	Teachers' Aides	(g) distributing and collecting lesson material.	Non-routine manual physical
5321	Health Care Assistants	providing care, support and treatment to patients and residents of medical, rehabilitative and residential care facilities according to treatment plans established by medical, nursing and other health professionals;	Non-routine manual physical
5321	Health Care Assistants	assisting patients with personal and therapeutic care needs such as personal hygiene, feeding, dressing, physical mobility and exercise, communication,	Non-routine manual physical

		taking oral medications and changing dressings;	
5321	Health Care Assistants	positioning, lifting and turning patients and transporting them in wheelchairs or on movable beds;	Non-routine manual physical
5321	Health Care Assistants	maintaining patients' environmental hygiene standards, such as cleaning patient rooms and changing bed linen;v	Non-routine manual physical
5321	Health Care Assistants	providing massage and other non-pharmacological pain relief measures, such as during pregnancy and labour;	Non-routine manual physical
5321	Health Care Assistants	observing patients' condition, responses and behaviour and reporting changes to a health professional.	Non-routine analytical
5322	Home-based Personal Care Workers	assisting clients with personal and therapeutic care needs such as personal hygiene, feeding, dressing, physical mobility and exercise, communication, taking oral medications and changing dressings, usually according to care plans established by a health professional;	Non-routine manual physical
5322	Home-based Personal Care Workers	maintaining records of client care, changes in condition and responses to care and treatment, and reporting concerns or providing referrals to a health or social services professional;	Routine cognitive
5322	Home-based Personal Care Workers	positioning and lifting clients with physical mobility challenges, and helping transport them in wheelchairs and motor vehicles;	Non-routine manual physical



5322	Home-based Personal Care Workers	providing clients and families with emotional support, information and advice on topics such as nutrition, hygiene, exercise, caring for infants or adapting to disability or illness;	Non-routine interpersonal
5322	Home-based Personal Care Workers	maintaining clients' environmental hygiene standards, such as changing bed linen, washing clothes and dishes, and cleaning living quarters;	Non-routine manual physical
5322	Home-based Personal Care Workers	providing psychological support to clients such as through conversation or reading aloud;	Non-routine interpersonal
5322	Home-based Personal Care Workers	planning, purchasing, preparing or serving meals to meet nutritional requirements and prescribed diets;	Non-routine manual physical
5322	Home-based Personal Care Workers	providing support to parents and care for newborns during the postpartum period;	Non-routine interpersonal
5322	Home-based Personal Care Workers	scheduling and accompanying clients for appointments with medical doctors and other health professionals, or performing other errands.	Non-routine interpersonal
5329	Personal Care Workers in Health Services Not Elsewhere Classified	cleaning and sterilizing surgical, dental and pharmaceutical instruments, bottles, beakers and other equipment;	Non-routine manual physical
5329	Personal Care Workers in Health Services Not Elsewhere Classified	labelling drugs, chemicals and other pharmaceutical preparations and replenishing stock on shelves;	Routine cognitive
5329	Personal Care Workers in Health Services Not Elsewhere Classified	lifting, turning and moving patients and transporting them in wheelchairs or on moveable beds;	Non-routine manual physical

5329	Personal Care Workers in Health Services Not Elsewhere Classified	preparing patients for examination or treatment;	Non-routine interpersonal
5329	Personal Care Workers in Health Services Not Elsewhere Classified	setting up instrument trays, preparing materials, and assisting dentists or radiographers during procedures;	Non-routine manual physical
5329	Personal Care Workers in Health Services Not Elsewhere Classified	exposing diagnostic X-rays.	Routine cognitive
5411	Firefighters	(a) responding to fire alarms and other calls for assistance, such as automobile and industrial accidents, bomb threats and other emergencies;	Non-routine manual physical
5411	Firefighters	(b) controlling and extinguishing fires using manual and power equipment and firefighting chemicals;	Non-routine manual physical
5411	Firefighters	(c) fighting special types of fires and using special equipment in industrial establishments;	Non-routine manual physical
5411	Firefighters	(d) rescuing people from burning buildings and accident sites and those trapped in dangerous situations;	Non-routine manual physical
5411	Firefighters	(e) preventing or limiting the spread of dangerous substances in case of fires or accidents;	Non-routine manual physical
5411	Firefighters	(f) informing the public about fire prevention.	Non-routine interpersonal
5412	Police Officers	(a) patrolling a specific area to maintain public order, responding to emergencies, protecting people and property and enforcing laws and regulations;	Non-routine manual physical

5412	Police Officers	(b) identifying, pursuing and arresting suspects and perpetrators of criminal acts;	Non-routine analytical
5412	Police Officers	(c) directing traffic and assuming authority in the event of accidents;	Non-routine manual physical
5412	Police Officers	(d) providing emergency assistance to victims of accidents, crimes and natural disasters.	Non-routine manual physical
5413	Prison Guards	(a) searching arriving prisoners, putting their valuables in safekeeping, escorting prisoners to cells and locking them in;	Routine manual
5413	Prison Guards	(b) making periodic inspection tours of cells and inspecting and maintaining the security of locks, windows, doors and gates;	Routine cognitive
5413	Prison Guards	(c) supervising prisoners at work and meals, and during recreation periods;	Non-routine interpersonal
5413	Prison Guards	(d) observing the conduct and behaviour of prisoners to prevent disturbances and escapes;	Non-routine interpersonal
5413	Prison Guards	(e) patrolling prison areas to prevent escapes;	Non-routine manual physical
5413	Prison Guards	(f) assisting with the implementation of rehabilitation programmes;	Non-routine interpersonal
5413	Prison Guards	(g) escorting prisoners in transit and during temporary leave.	Non-routine interpersonal
5414	Security Guards	patrolling premises and checking doors, windows and gates to prevent and detect signs of unauthorized entry;	Non-routine manual physical
5414	Security Guards	controlling access to establishments, monitoring and authorizing the entrance or departure of employees and visitors, checking identification and issuing security passes;	Routine manual

5414	Security Guards	circulating among visitors, patrons or employees to preserve order, protect property from theft or vandalism and enforce the regulations of the establishment;	Routine manual
5414	Security Guards	responding to alarms, investigating disturbances and contacting superiors, police or firefighters as appropriate;	Non-routine manual physical
5414	Security Guards	performing security checks of passengers and luggage at airports;	Routine manual
5414	Security Guards	picking up and ensuring the safe delivery of cash and valuables to banks, automated teller machines and retail establishments.	Routine cognitive
5419	Protective Services Workers Not Elsewhere Classified	patrolling beaches and swimming pools to prevent accidents and to rescue bathers from drowning;	Non-routine manual physical
5419	Protective Services Workers Not Elsewhere Classified	monitoring traffic flow to locate safe gaps through which pedestrians can cross streets;	Non-routine analytical
5419	Protective Services Workers Not Elsewhere Classified	responding to citizen complaints concerning stray domestic animals, livestock and wildlife, issuing warnings and citations to owners and impounding lost, homeless and dangerous animals;	Non-routine manual physical
5419	Protective Services Workers Not Elsewhere Classified	patrolling an assigned area to enforce parking regulations;	Non-routine manual physical

5419	Protective Services Workers Not Elsewhere Classified	directing traffic.	Non-routine manual physical
6111	Field Crop and Vegetable Growers	monitoring market activity and conditions, determining types and quantities of crops to be grown, and planning and coordinating production accordingly;	Non-routine analytical
6111	Field Crop and Vegetable Growers	preparing soil by hand or machine, and spreading fertilizers and manure;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	selecting and sowing seeds, and planting seedlings;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	maintaining crops by cultivating soil, by transplanting, pruning or thinning plants, and by setting up and operating irrigation equipment;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	controlling weeds, pests and diseases by applying herbicides and pesticides;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	harvesting crops and destroying diseased or superfluous crops;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	inspecting, cleaning, grading, packaging, storing and loading crops for sale or delivery to market;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	tending working animals and maintaining farm buildings, structures, equipment and water supply systems;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	storing and carrying out some processing of produce;	Non-routine manual physical
6111	Field Crop and Vegetable Growers	promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies and maintaining and evaluating	Non-routine interpersonal

		records of farm activities and transactions;	
6111	Field Crop and Vegetable Growers	training and supervising workers in crop production, maintenance duties, and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6112	Tree and Shrub Crop Growers	monitoring market activity and conditions, determining types and quantities of crops to be grown, and planning and coordinating production accordingly;	Non-routine analytical
6112	Tree and Shrub Crop Growers	preparing soil by hand or machine, and spreading fertilizers and manure;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	selecting and sowing seeds, and planting seedlings;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	maintaining crops by cultivating soil, by transplanting, pruning or thinning trees and shrubs, and by setting up and operating irrigation equipment;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	controlling weeds, pests and diseases by applying herbicides and pesticides;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	tending trees or bushes, collecting sap and harvesting crops;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	inspecting, cleaning, grading, packaging, storing and loading crops for sale or delivery to market;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	tending working animals and maintaining farm buildings, structures, equipment and water supply systems;	Non-routine manual physical
6112	Tree and Shrub Crop Growers	storing and carrying out some processing of produce;	Non-routine manual physical

6112	Tree and Shrub Crop Growers	promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies, and maintaining and evaluating records of farm activities and transactions;	Non-routine interpersonal
6112	Tree and Shrub Crop Growers	training and supervising workers in crop production, maintenance duties, and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6113	Gardeners, Horticultural and Nursery Growers	monitoring market activity and conditions determining kinds and amounts of vegetables, horticultural and nursery products to be grown, and planning and coordinating production accordingly;	Non-routine analytical
6113	Gardeners, Horticultural and Nursery Growers	preparing land by conditioning soil, levelling ground and installing and operating irrigation and drainage systems;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	planting trees, hedges, garden plants and grass;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	pruning and trimming trees, shrubs and hedges, installing plant supports and protection, and rolling, mowing, aerating and edging lawns;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	constructing features and facilities within gardens, such as paths or paved areas, walls, rockeries, garden beds, ponds and water features, sheds and fences;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	checking the health of plants and trees, identifying and treating weeds, pests and diseases, and applying mulch and fertilizers;	Non-routine analytical

6113	Gardeners, Horticultural and Nursery Growers	producing saplings, bulbs and seeds and raising plants from seeds or cuttings;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	harvesting crops, inspecting, cleaning, grading, packaging, storing and loading products for sale or delivery to market;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	maintaining buildings, greenhouses and other structures, equipment and water supply systems;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	storing and carrying out some processing of produce;	Non-routine manual physical
6113	Gardeners, Horticultural and Nursery Growers	promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies, and maintaining and evaluating records of activities and transactions;	Non-routine interpersonal
6113	Gardeners, Horticultural and Nursery Growers	training and supervising workers in production, maintenance duties, and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6114	Mixed Crop Growers	monitoring market activity and conditions, determining types and quantities of crops to be grown, and planning and coordinating production accordingly;	Non-routine analytical
6114	Mixed Crop Growers	preparing soil by hand or machine, and spreading fertilizers and manure;	Non-routine manual physical
6114	Mixed Crop Growers	selecting and sowing seeds, and planting seedlings;	Non-routine manual physical
6114	Mixed Crop Growers	maintaining crops by cultivating soil, by transplanting, pruning or thinning crops, trees and shrubs, and by setting up and	Non-routine manual physical



		operating irrigation equipment;	
6114	Mixed Crop Growers	growing flowers and vegetables by intensive cultivation;	Non-routine manual physical
6114	Mixed Crop Growers	producing saplings, bulbs and seeds;	Non-routine manual physical
6114	Mixed Crop Growers	harvesting crops and inspecting, cleaning, grading, packaging, storing and loading products for sale or delivery to market;	Non-routine manual physical
6114	Mixed Crop Growers	tending working animals and maintaining farm buildings, structures, equipment and water supply systems;	Non-routine manual physical
6114	Mixed Crop Growers	storing and carrying out some processing of produce;	Non-routine manual physical
6114	Mixed Crop Growers	promoting and marketing products, arranging the sale, purchase and transportation of produce and supplies, and maintaining and evaluating records of activities and transactions;	Non-routine interpersonal
6114	Mixed Crop Growers	training and supervising workers in production, maintenance duties, and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6115			#N/A
6116			#N/A
6117			#N/A
6118			#N/A
6119			#N/A
6121	Livestock and Dairy Producers	monitoring market activity and conditions, determining kinds and amounts of stock to produce, and planning and coordinating production accordingly;	Non-routine analytical

6121	Livestock and Dairy Producers	cultivating pastures and providing and monitoring fodder and water supplies to maintain appropriate nutritional levels and condition of livestock;	Routine cognitive
6121	Livestock and Dairy Producers	monitoring and examining animals to detect illness, injury or disease, and to check physical condition such as rate of weight gain;	Routine cognitive
6121	Livestock and Dairy Producers	grooming, marking, clipping, trimming, drenching and/or castrating animals, and shearing coats to collect hair or wool;	Non-routine manual physical
6121	Livestock and Dairy Producers	herding livestock to pastures for grazing or to scales, sheds, vehicles or other enclosures;	Non-routine manual physical
6121	Livestock and Dairy Producers	milking animals by hand or using milking machines;	Non-routine manual physical
6121	Livestock and Dairy Producers	mixing feed, additives and medicines in prescribed portions and distributing or hand-feeding to animals for consumption;	Non-routine manual physical
6121	Livestock and Dairy Producers	performing duties related to livestock reproduction, such as breeding, artificial insemination and helping with animal births;	Non-routine manual physical
6121	Livestock and Dairy Producers	maintaining and cleaning farm buildings, machinery, equipment and structures;	Non-routine manual physical
6121	Livestock and Dairy Producers	slaughtering and skinning animals and preparing them for market;	Non-routine manual physical
6121	Livestock and Dairy Producers	storing and carrying out some processing of animal and dairy produce;	Non-routine manual physical
6121	Livestock and Dairy Producers	promoting and marketing products, arranging the sale, purchase and transportation of livestock, produce and supplies, and maintaining and	Non-routine interpersonal

		evaluating records of farm activities and transactions;	
6121	Livestock and Dairy Producers	training and supervising workers in animal care procedures, maintenance duties and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6122	Poultry Producers	monitoring market activity, planning and coordinating production accordingly, and maintaining and evaluating records of farming activities;	Non-routine analytical
6122	Poultry Producers	growing and purchasing feed and other supplies needed to maintain appropriate nutritional levels and condition of poultry;	Non-routine interpersonal
6122	Poultry Producers	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;	Routine cognitive
6122	Poultry Producers	mixing feed and feed additives and filling feed and water containers;	Non-routine manual physical
6122	Poultry Producers	vaccinating poultry via drinking water, injection or dusting of air;	Non-routine manual physical
6122	Poultry Producers	collecting and storing eggs and packaging them for sale or delivery to market;	Non-routine manual physical
6122	Poultry Producers	determining sex of chicks and facilitating breeding, artificial insemination and hatching of eggs;	Non-routine manual physical
6122	Poultry Producers	renting or investing in, and maintaining and cleaning,	Non-routine manual physical

		farm buildings, machinery, equipment and structures;	
6122	Poultry Producers	slaughtering and dressing poultry for sale or delivery to market;	Non-routine manual physical
6122	Poultry Producers	storing and carrying out some processing of produce;	Non-routine manual physical
6122	Poultry Producers	arranging the sale, purchase and transportation of stock, produce and supplies;	Non-routine interpersonal
6122	Poultry Producers	training and supervising workers in poultry production procedures, maintenance duties and health and safety precautions, and hiring and discharging workers and contractors.	Non-routine interpersonal
6126			#N/A
6127	#N/A	dne	#N/A
6129	Animal Producers Not Elsewhere Classified	(a) monitoring market activity and conditions, determining kinds and amounts of products to produce, and planning and coordinating production accordingly;	Non-routine analytical
6129	Animal Producers Not Elsewhere Classified	(b) raising, feeding and tending animals;	Non-routine manual physical
6129	Animal Producers Not Elsewhere Classified	(c) monitoring and examining animals to detect illness, injury or disease, and to check physical condition such as rate of weight gain;	Routine cognitive
6129	Animal Producers Not Elsewhere Classified	(d) performing duties related to animal reproduction, such as breeding, artificial insemination and helping with animal births;	Non-routine manual physical
6129	Animal Producers Not Elsewhere Classified	(e) renting or investing in, and maintaining and cleaning, buildings, machinery, equipment and structures;	Non-routine manual physical

6129	Animal Producers Not Elsewhere Classified	(f) slaughtering and skinning animals and preparing animal products for market;	Non-routine manual physical
6129	Animal Producers Not Elsewhere Classified	(g) storing and carrying out some processing of produce;	Non-routine manual physical
6129	Animal Producers Not Elsewhere Classified	(h) promoting and marketing products, arranging the sale, purchase and transportation of stock, produce and supplies, and maintaining and evaluating records of activities and transactions;	Non-routine interpersonal
6129	Animal Producers Not Elsewhere Classified	(i) training and supervising workers in animal care procedures, maintenance duties and health and safety precautions.	Non-routine interpersonal
6130	Mixed Crop and Animal Producers	monitoring market activity and conditions, determining kinds and amounts of crops to be grown and animals to be raised, and planning and coordinating production accordingly;	Non-routine analytical
6130	Mixed Crop and Animal Producers	purchasing seeds, fertilizer, and other supplies;	Non-routine interpersonal
6130	Mixed Crop and Animal Producers	performing operations such as land preparation, sowing, planting, cultivating and harvesting crops;	Non-routine manual physical
6130	Mixed Crop and Animal Producers	producing or buying fodder and other food supplies;	Routine cognitive
6130	Mixed Crop and Animal Producers	breeding, raising and tending animals;	Non-routine manual physical
6130	Mixed Crop and Animal Producers	killing and skinning animals, and preparing animals or animal products for market;	Non-routine manual physical

6130	Mixed Crop and Animal Producers	renting or investing in and maintaining and cleaning farm buildings, machinery, equipment, and structures;	Non-routine manual physical
6130	Mixed Crop and Animal Producers	storing and carrying out some processing of produce;	Non-routine manual physical
6130	Mixed Crop and Animal Producers	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;	Non-routine interpersonal
6130	Mixed Crop and Animal Producers	training and supervising workers in animal care procedures, maintenance duties, and health and safety precautions and hiring and discharging workers and contractors.	Non-routine interpersonal
6213			#N/A
6214			#N/A
6221	Aquaculture Workers	breeding, raising and cultivating fish, mussels, oysters and other forms of aquatic life as cash crops or for release into freshwater or saltwater;	Non-routine manual physical
6221	Aquaculture Workers	collecting and recording growth, production and environmental data;	Routine cognitive
6221	Aquaculture Workers	conducting and supervising stock examinations in order to identify diseases or parasites;	Non-routine interpersonal
6221	Aquaculture Workers	monitoring environments to ensure maintenance of optimum conditions for aquatic life;	Routine cognitive
6221	Aquaculture Workers	directing and monitoring trapping and spawning of fish, egg incubation and fry rearing, applying knowledge of management and fish culturing techniques;	Routine cognitive

6221	Aquaculture Workers	cleaning, freezing, icing or salting catch on- or offshore, and preparing fish and other products for shipment;	Non-routine manual physical
6221	Aquaculture Workers	maintaining buildings, tanks, machinery, boats and other equipment;	Non-routine manual physical
6221	Aquaculture Workers	delivering or marketing products;	Non-routine interpersonal
6221	Aquaculture Workers	renting or investing in buildings, equipment and machinery, and purchasing food and other supplies;	Non-routine interpersonal
6221	Aquaculture Workers	supervising and training aquaculture and fish hatchery support workers.	Non-routine interpersonal
6222	Inland and Coastal Waters Fishery Workers	preparing and repairing nets and other fishing gear and equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	selecting areas for fishing, plotting courses and computing navigational positions using compass, charts and other aids;	Non-routine analytical
6222	Inland and Coastal Waters Fishery Workers	operating fishing vessels to, from and at fishing grounds;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	baiting, setting, operating and hauling in fishing gear by hand or using hoisting equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	gathering various forms of aquatic life from shores and shallow waters;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	maintaining engine fishing gear and other on-board equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	keeping records of transactions, fishing activities, weather and sea conditions, and estimating costs and budgets;	Routine cognitive
6222	Inland and Coastal Waters Fishery Workers	sorting and storing catch in holds with salt and ice;	Routine cognitive

6222	Inland and Coastal Waters Fishery Workers	removing catches from fishing equipment, measuring them to ensure compliance with legal size and returning undesirable or illegal catches to the water;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	directing fishing operations, and supervising fishing crew members.	Non-routine interpersonal
6225			#N/A
6226			#N/A
6330	Subsistence Mixed Crop and Livestock Farmers	(a) preparing the soil, sowing, planting, tending and harvesting field crops;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(b) growing vegetables, fruit and other tree and shrub crops;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(c) gathering wild fruits, medicinal and other plants;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(d) breeding, tending and feeding animals and poultry mainly to obtain meat, eggs, milk, hair, skin or other products;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(e) fetching water and gathering firewood;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(f) storing produce for later use and carrying out some processing of produce;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(g) building and maintaining houses and other shelters;	Non-routine manual physical
6330	Subsistence Mixed Crop and Livestock Farmers	(h) making tools, clothes and utensils for use by the household;	Non-routine manual physical



6330	Subsistence Mixed Crop and Livestock Farmers	(i) selling or bartering some products at local markets.	Routine cognitive
7112	Bricklayers and Related Workers	(a) 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;	Non-routine manual physical
7112	Bricklayers and Related Workers	(b) laying footpaths, kerbs and pavements;	Routine manual
7112	Bricklayers and Related Workers	(c) laying bricks or other masonry to build patios, garden walls and other decorative installations	Routine manual
7113	Stonemasons, Stone cutters, Splitters and Carvers	driving wedges into quarried stone to break it into slabs or blocks;	Non-routine manual physical
7113	Stonemasons, Stone cutters, Splitters and Carvers	selecting and grading slabs and blocks of granite, marble and other stone;	Routine cognitive
7113	Stonemasons, Stone cutters, Splitters and Carvers	cutting, shaping and finishing building and monumental stone such as granite or marble using hand tools or hand-held power tools;	Non-routine manual physical
7113	Stonemasons, Stone cutters, Splitters and Carvers	making patterns and marking shapes on stone for subsequent sawing, planing, drilling and other dressing and cutting operations;	Non-routine manual physical
7113	Stonemasons, Stone cutters, Splitters and Carvers	cutting and carving characters, figures or designs on stone blocks used for monuments or memorials;	Non-routine manual physical
7113	Stonemasons, Stone cutters, Splitters and Carvers	setting stone in the erection of monuments and memorials;	Non-routine manual physical

7113	Stonemasons, Stone cutters, Splitters and Carvers	repairing and replacing stonework on old buildings, churches and monuments.	Non-routine manual physical
7115	Carpenters and Joiners	making, altering and repairing structural and other woodwork at a workbench or on a construction site;	Non-routine manual physical
7115	Carpenters and Joiners	constructing, erecting and installing heavy-framed wooden structures on building sites;	Non-routine manual physical
7115	Carpenters and Joiners	fitting, assembling and altering internal and external fixtures of buildings, such as walls, doors, door and window frames, facings and panelling;	Non-routine manual physical
7115	Carpenters and Joiners	making, repairing and fitting scenic equipment for theatrical performances and motion picture or television productions;	Non-routine manual physical
7115	Carpenters and Joiners	constructing, assembling, altering and repairing wooden fixtures and fittings in train coaches, aircraft, ships, boats, floats and other vehicles.	Non-routine manual physical
7119	Building Frame and Related Trades Workers Not Elsewhere Classified	(a) climbing and performing miscellaneous construction and building maintenance work on tall structures such as towers, chimneys and spires;	Non-routine manual physical
7119	Building Frame and Related Trades Workers Not Elsewhere Classified	(b) erecting temporary metal or wooden scaffolding on building sites;	Non-routine manual physical
7119	Building Frame and Related Trades Workers Not Elsewhere Classified	(c) demolishing buildings and other structures.	Routine manual
7121	Roofers	(a) studying drawings, specifications and construction	Non-routine analytical

		sites to determine materials required;	
7121	Roofers	(b) covering roof frameworks with slate and prefabricated tiles to cover pitched roofs;	Non-routine manual physical
7121	Roofers	(c) laying a waterproof shield and fixing metallic or synthetic materials to a building's frame;	Non-routine manual physical
7121	Roofers	(d) sizing and cutting roofing materials to fit around edges, corners and protuberances such as chimneys;	Non-routine manual physical
7121	Roofers	(e) using natural materials such as thatching to provide roof coverings;	Non-routine manual physical
7121	Roofers	(f) creating temporary structures such as scaffolding and ladders.	Non-routine manual physical
7122	Floor Layers and Tile Setters	preparing floor areas for covering with a variety of materials;	Non-routine manual physical
7122	Floor Layers and Tile Setters	assembling carpet, tiles or other materials and laying them on floors according to design and other specifications;	Routine manual
7122	Floor Layers and Tile Setters	preparing wall areas for covering with tiles or other materials for decorative or other purposes such as acoustic insulation;	Non-routine manual physical
7122	Floor Layers and Tile Setters	setting tiles and constructing and laying mosaic panels to walls, floors and other surfaces.	Routine manual
7124	Insulation Workers	cutting insulation material by size and shape;	Non-routine manual physical
7124	Insulation Workers	applying slabs and sheets of insulating or sound-absorbing materials to walls, floors and ceilings of buildings;	Routine manual

7124	Insulation Workers	blowing and packing insulating or sound-absorbing materials into cavities between walls, floors and ceilings of buildings with power-driven machines;	Routine manual
7124	Insulation Workers	examining plans, specifications and work sites to determine the type, quality and quantity of insulation material required;	Routine cognitive
7124	Insulation Workers	applying insulating materials to exposed surfaces of equipment such as boilers, pipes and tanks;	Non-routine manual physical
7124	Insulation Workers	insulating refrigeration and air conditioning equipment.	Non-routine manual physical
7125	Glaziers	(a) selecting the type of glass to be used, cutting to right size and shape and installing in windows, doors, showers and partitions of buildings;	Non-routine analytical
7125	Glaziers	(b) installing glass and mirrors in skylights, display cases, interior walls and ceilings;	Non-routine manual physical
7125	Glaziers	(c) installing or replacing windscreens in vehicles or boats;	Non-routine manual physical
7125	Glaziers	(d) creating decorative glass features such as glass walls, staircases, balustrades and stained-glass windows.	Non-routine manual physical
7126	Plumbers and Pipe Fitters	examining blueprints, drawings and specifications to determine the layout of plumbing and ventilation systems and materials required;	Non-routine analytical
7126	Plumbers and Pipe Fitters	measuring, cutting, threading, bending, jointing, assembling, installing, maintaining and repairing pipes, fittings and fixtures of drainage, heating, ventilation, water supply and sewerage systems;	Non-routine manual physical

7126	Plumbers and Pipe Fitters	installing gas appliances, dishwashers and water heaters, sinks and toilets using hand and power tools;	Non-routine manual physical
7126	Plumbers and Pipe Fitters	laying clay, concrete or cast-iron pipes in ditches to form sewers, drains or water mains, or for other purposes;	Non-routine manual physical
7126	Plumbers and Pipe Fitters	inspecting, examining and testing installed systems and pipes, using pressure gauge, hydrostatic testing, observation or other methods.	Routine cognitive
7127	Air Conditioning and Refrigeration Mechanics	interpreting blueprints, drawings and other specifications;	Non-routine analytical
7127	Air Conditioning and Refrigeration Mechanics	assembling, installing and repairing components such as compressors, motors, condensers, evaporators, switches and gauges for air conditioning and refrigeration systems;	Non-routine manual physical
7127	Air Conditioning and Refrigeration Mechanics	connecting piping and equipment by bolting, riveting, welding or brazing;	Non-routine manual physical
7127	Air Conditioning and Refrigeration Mechanics	testing systems, diagnosing faults and performing routine maintenance or servicing.	Routine cognitive
7131	Painters and Related Workers	cleaning and preparing walls and other surfaces of buildings for painting or wallpapering;	Non-routine manual physical
7131	Painters and Related Workers	selecting and preparing paints to required colours by mixing pigments and additives;	Routine cognitive
7131	Painters and Related Workers	applying or spraying paint, varnish and similar materials to surfaces, fixtures and fittings of buildings;	Non-routine manual physical
7131	Painters and Related Workers	measuring and hanging wallpaper or other fabrics on interior walls and ceilings;	Routine cognitive

7131	Painters and Related Workers	applying paints, varnishes and stains to surfaces using brushes, rollers and sprays.	Non-routine manual physical
7132	Spray Painters and Varnishers	preparing surfaces to be coated using a variety of methods to remove grease, dirt and rust;	Non-routine manual physical
7132	Spray Painters and Varnishers	painting cars, buses, trucks and other vehicles, and applying varnish and other protective coatings;	Non-routine manual physical
7132	Spray Painters and Varnishers	applying paint as well as protective coatings of enamel or varnish on metal, wooden and other manufactured products, usually with a hand-spraying device.	Non-routine manual physical
7211	Metal Moulders and Coremakers	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;	Non-routine manual physical
7211	Metal Moulders and Coremakers	making cores for use in metal moulds;	Non-routine manual physical
7211	Metal Moulders and Coremakers	cleaning and smoothing moulds, core boxes, and repairing surface imperfections;	Non-routine manual physical
7211	Metal Moulders and Coremakers	moving and positioning work pieces such as mould sections, patterns and bottom boards, using cranes, or signalling others to move work pieces;	Non-routine manual physical
7211	Metal Moulders and Coremakers	positioning patterns inside mould sections and clamping sections together;	Non-routine manual physical
7211	Metal Moulders and Coremakers	cutting spouts, runner holes and sprue holes into moulds;	Non-routine manual physical
7211	Metal Moulders and Coremakers	lifting upper mould sections from lower sections and remove moulded patterns.	Non-routine manual physical

7212	Welders and Flame Cutters	welding metal parts using gas flame, or an electric arc, thermite compound or other methods;	Non-routine manual physical
7212	Welders and Flame Cutters	operating resistance-welding machines;	Routine manual
7212	Welders and Flame Cutters	using blowtorches to make and repair lead linings, pipes, floors and other lead fixtures;	Non-routine manual physical
7212	Welders and Flame Cutters	brazing metal parts together;	Non-routine manual physical
7212	Welders and Flame Cutters	cutting metal pieces using gas flame or an electric arc;	Non-routine manual physical
7212	Welders and Flame Cutters	joining metal parts by hand soldering;	Non-routine manual physical
7212	Welders and Flame Cutters	monitoring the fitting, burning and welding processes to avoid overheating of parts or warping, shrinking, distortion or expansion of material;	Routine manual
7212	Welders and Flame Cutters	examining work pieces for defects and measuring work pieces with straight edges or templates to ensure conformity with specifications.	Routine cognitive
7213	Sheet Metal Workers	marking sheet metal for cutting and shaping;	Non-routine manual physical
7213	Sheet Metal Workers	making and repairing household utensils and other articles in tin, copper and light alloys, or ornamental articles and fittings;	Non-routine manual physical
7213	Sheet Metal Workers	making and repairing boilers, tanks, vats and similar containers;	Non-routine manual physical
7213	Sheet Metal Workers	installing and repairing sheet metal parts of vehicles and aircraft;	Non-routine manual physical
7213	Sheet Metal Workers	converting blueprints into shop drawings to be followed in the construction and assembly of sheet metal products;	Non-routine analytical

7213	Sheet Metal Workers	determining project requirements, including scope, assembly sequences and required methods and materials, according to blueprints, drawings and written or verbal instructions;	Non-routine analytical
7213	Sheet Metal Workers	inspecting product quality and installation to ensure conformity with specifications.	Routine cognitive
7214	Structural Metal Preparers and Erectors	marking metal framework as a guide when drilling cutting, and shaping metal stock for use in buildings, ships and other structures;	Routine cognitive
7214	Structural Metal Preparers and Erectors	drilling, cutting and shaping structural steel in a workshop;	Non-routine manual physical
7214	Structural Metal Preparers and Erectors	erecting steel framework for buildings, bridges and other constructions;	Non-routine manual physical
7214	Structural Metal Preparers and Erectors	assembling and erecting the framework and other metal parts of ships' structures;	Non-routine manual physical
7214	Structural Metal Preparers and Erectors	shaping and fitting structural steel plates of ships under construction or repair;	Non-routine manual physical
7214	Structural Metal Preparers and Erectors	riveting structural metal members by hand, machine or pneumatic riveter.	Non-routine manual physical
7215	Riggers and Cable Splicers	estimating the size, shape and weight of objects to be moved and deciding on the type of equipment to move them;	Routine cognitive
7215	Riggers and Cable Splicers	installing and repairing cables, ropes, wires, pulleys and other tackle;	Non-routine manual physical
7215	Riggers and Cable Splicers	joining, repairing and fitting attachments to wires, ropes and cables;	Non-routine manual physical
7215	Riggers and Cable Splicers	working as member of a crew erecting and repairing derricks for drilling water, gas and oil wells;	Non-routine manual physical



7215	Riggers and Cable Splicers	lifting and mounting scenery, lighting and other equipment in theatres and on film sets;	Non-routine manual physical
7215	Riggers and Cable Splicers	installing and maintaining communication towers, aerial cableways, funicular railways, ski lifts and similar infrastructure.	Non-routine manual physical
7221	Blacksmiths, Hammersmiths and Forging Press Workers	heating metal in forge furnaces and manufacturing and repairing articles by drawing, bending, cutting, hammering metal on an anvil, punching, shearing, joining and hardening or tempering;	Non-routine manual physical
7221	Blacksmiths, Hammersmiths and Forging Press Workers	shaping heated metal into forgings on power hammers equipped with open dies;	Non-routine manual physical
7221	Blacksmiths, Hammersmiths and Forging Press Workers	operating closed-die drop hammers to forge metal articles;	Routine manual
7221	Blacksmiths, Hammersmiths and Forging Press Workers	operating a power-press machine equipped with closed dies to forge metal articles;	Routine manual
7221	Blacksmiths, Hammersmiths and Forging Press Workers	drawing wire;	Non-routine manual physical
7221	Blacksmiths, Hammersmiths and Forging Press Workers	reading work orders or blueprints to determine specified tolerances and sequences of operations for machine setup;	Routine cognitive
7221	Blacksmiths, Hammersmiths and Forging Press Workers	measuring and inspecting machine parts to ensure conformity with product specifications.	Routine cognitive
7222	Toolmakers and Related Workers	reading and interpreting engineering drawings and specifications of tools, dies, prototypes or models;	Non-routine analytical

7222	Toolmakers and Related Workers	preparing templates and sketches, and determining work processes;	Non-routine analytical
7222	Toolmakers and Related Workers	visualizing and computing dimensions, sizes, shapes and tolerances of assemblies, based on specifications;	Non-routine analytical
7222	Toolmakers and Related Workers	positioning, securing and measuring metal stock or castings to lay out for machining;	Routine cognitive
7222	Toolmakers and Related Workers	setting up, operating and maintaining conventional and computer numerically controlled machine tools to cut, turn, mill, plane, drill, bore, grind or otherwise shape work pieces to prescribed dimensions and finish;	Routine manual
7222	Toolmakers and Related Workers	fitting and assembling parts to make and repair jigs, fixtures and gauges;	Non-routine manual physical
7222	Toolmakers and Related Workers	repairing and modifying sports guns and other small arms;	Non-routine manual physical
7222	Toolmakers and Related Workers	making, fitting, assembling, repairing and installing lock parts and locks;	Non-routine manual physical
7222	Toolmakers and Related Workers	making and repairing metal patterns for preparation of foundry moulds;	Non-routine manual physical
7222	Toolmakers and Related Workers	laying out lines and reference points on metal stock to guide other workers who cut, turn, mill, grind or otherwise shape metal;	Routine cognitive
7222	Toolmakers and Related Workers	verifying dimensions, alignments and clearances of finished parts for conformity with specifications, using precision measuring instruments and testing completed items for proper operation.	Routine cognitive

7223	Metal Working Machine Tool Setters and Operators	setting one or more types of machine tool for production of metal articles in standardized series;	Routine manual
7223	Metal Working Machine Tool Setters and Operators	operating and monitoring metal working machines such as lathes, milling, planing, boring, drilling, grinding or honing machines, including multipurpose numerically controlled metal working machines;	Routine manual
7223	Metal Working Machine Tool Setters and Operators	performing similar tasks when machining plastics and other metal substitutes;	Non-routine manual physical
7223	Metal Working Machine Tool Setters and Operators	observing machine operations to detect work piece defects or machine malfunctions, and adjusting machines as necessary;	Routine cognitive
7223	Metal Working Machine Tool Setters and Operators	inspecting work pieces for defects, and measuring work pieces to determine accuracy of machine operation, using rules, templates or other measuring instruments;	Routine cognitive
7223	Metal Working Machine Tool Setters and Operators	changing worn machine accessories such as cutting tools and brushes, using hand tools.	Non-routine manual physical
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(a) operating fixed or portable buffing and polishing machines;	Routine manual
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(b) sharpening cutting tools and instruments using grinding wheels or mechanically operated grinding machines;	Non-routine manual physical
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(c) repairing, adjusting and sharpening saw blades and metal teeth of cylinders in textile carding machines;	Non-routine manual physical

7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(d) dressing grinding wheels according to specifications;	Routine cognitive
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(e) monitoring machine operations to determine whether adjustments are necessary, and stopping machines when problems occur;	Routine cognitive
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(f) inspecting, feeling and measuring work pieces to ensure that surfaces and dimensions meet specifications;	Routine cognitive
7224	Metal Polishers, Wheel Grinders and Tool Sharpeners	(g) selecting and mounting grinding wheels on machines according to specifications, using hand tools and applying knowledge of abrasives and grinding procedures.	Routine cognitive
7231	Motor Vehicle Mechanics and Repairers	detecting and diagnosing faults in engines and parts;	Routine cognitive
7231	Motor Vehicle Mechanics and Repairers	fitting, examining, testing and servicing motor vehicle and motorcycle engines;	Routine cognitive
7231	Motor Vehicle Mechanics and Repairers	replacing engine components or complete engines;	Non-routine manual physical
7231	Motor Vehicle Mechanics and Repairers	fitting, examining, adjusting, dismantling, rebuilding and replacing defective parts of motor vehicles;	Non-routine manual physical
7231	Motor Vehicle Mechanics and Repairers	installing or adjusting motors and brakes, and adjusting steering or other parts of motor vehicles;	Non-routine manual physical
7231	Motor Vehicle Mechanics and Repairers	installing, adjusting, servicing and replacing mechatronics components of motor vehicles;	Non-routine manual physical

7231	Motor Vehicle Mechanics and Repairers	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;	Non-routine manual physical
7231	Motor Vehicle Mechanics and Repairers	reassembling engines and parts after being repaired.	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	fitting, examining, testing and servicing aircraft engines;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	replacing engine components or complete engines;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	examining and inspecting airframes and aircraft components, including landing gear, hydraulic systems and de-icers to detect wear, cracks, breaks, leaks or other problems;	Routine cognitive
7232	Aircraft Engine Mechanics and Repairers	maintaining, repairing, overhauling, modifying and testing aircraft structural, mechanical and hydraulic systems;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	reading and interpreting manuals, service bulletins and other specifications to determine the feasibility and method of repairing or replacing malfunctioning or damaged components;	Non-routine analytical
7232	Aircraft Engine Mechanics and Repairers	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;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	inspecting completed work to certify that maintenance meets	Routine cognitive

		standards and the aircraft is ready for operation;	
7232	Aircraft Engine Mechanics and Repairers	maintaining repair logs, documenting all preventive and corrective aircraft maintenance;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	installing and testing electrical and electronic components, assemblies and systems in aircraft;	Non-routine manual physical
7232	Aircraft Engine Mechanics and Repairers	connecting components to assemblies such as radio systems, instruments, magnetos, inverters and in-flight refuelling systems.	Non-routine manual physical
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(a) fitting, installing, examining, servicing and repairing engines, machinery and mechanical equipment;	Non-routine manual physical
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(b) oiling and greasing stationary engines and machinery;	Non-routine manual physical
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(c) inspecting and testing new machinery and mechanical equipment for conformity with standards and specifications;	Routine cognitive
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(d) disassembling machinery and equipment to remove parts and make repairs;	Non-routine manual physical
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(e) examining parts for defects such as breakage and excessive wear;	Routine cognitive

7233	Agricultural and Industrial Machinery Mechanics and Repairers	(f) operating newly repaired machinery and equipment to verify the adequacy of repairs;	Routine manual
7233	Agricultural and Industrial Machinery Mechanics and Repairers	(g) recording repairs and maintenance performed.	Routine cognitive
7311	Precision-instrument Makers and Repairers	(a) repairing, cleaning and adjusting mechanisms of timing instruments such as watches and clocks;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(b) adjusting timing regulators, using calipers, watch-rate recorders and tweezers;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(c) cleaning, rinsing and drying timepiece parts, using solutions and ultrasonic or mechanical watch-cleaning machines;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(d) testing timepiece accuracy and performance, using meters and other electronic instruments;	Routine cognitive
7311	Precision-instrument Makers and Repairers	(e) testing accuracy of meters, gauges, indicators, or other recording or controlling instruments to locate defective components and for conformity with standards;	Routine cognitive
7311	Precision-instrument Makers and Repairers	(f) calibrating instruments or scales, using hand tools, computer or electronic devices;	Routine cognitive
7311	Precision-instrument Makers and Repairers	(g) inspecting components, connections and drive mechanisms to detect defects;	Routine cognitive

7311	Precision-instrument Makers and Repairers	(h) assembling instruments and devices such as barometers, control valves, gyroscopes, hygrometers, speedometers, tachometers and thermostats;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(i) 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;	Routine cognitive
7311	Precision-instrument Makers and Repairers	(j) adjusting and repairing masts, supporting structures, clearance lights, control panels, control cabling and wiring, and other electrical and mechanical devices;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(k) repairing and setting optical instruments such as microscopes, telescopes, theodolites and sextants;	Non-routine manual physical
7311	Precision-instrument Makers and Repairers	(l) checking whether assembled units conform to specifications and ensuring stipulated performance and sensitivity by standard tests.	Routine cognitive
7312	Musical Instrument Makers and Tuners	(a) fabricating and assembling musical instruments and instrument parts of wood, ebonite, metal, leather and other materials;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(b) repairing or replacing musical instrument parts and components such as strings, bridges, felts and keys, using hand and power tools;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(c) playing and inspecting instruments to evaluate their sound quality and to locate any defects;	Routine cognitive



7312	Musical Instrument Makers and Tuners	(d) adjusting string tensions to achieve proper tone or pitch of stringed instruments;	Routine cognitive
7312	Musical Instrument Makers and Tuners	(e) adjusting lips, reeds, or toe holes of organ pipes, using hand tools, to regulate airflow and loudness of sound;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(f) tuning and servicing pipe organs by adjusting pitch of organ A pipes to conform with pitch of the tuning fork and adjusting pitch of other pipes with reference to pitch of tuned pipes;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(g) installing new drumheads in percussion instruments;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(h) tuning accordions by aurally comparing pitch of reeds with master reeds and filing reeds to obtain standard pitch;	Routine cognitive
7312	Musical Instrument Makers and Tuners	(i) aligning pads and keys on reed or wind instruments;	Non-routine manual physical
7312	Musical Instrument Makers and Tuners	(j) tuning percussion instruments to required pitch by tightening or loosening cords holding leather pieces fixed atop or at both ends of the instrument;	Routine cognitive
7312	Musical Instrument Makers and Tuners	(k) assembling and installing new pipe organs and pianos in buildings.	Non-routine manual physical
7313	Jewellery and Precious metal Workers	casting jewellery and other non-ferrous metal articles by hand;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	creating new jewellery designs and modifying existing designs, using computers as necessary;	Non-routine analytical

7313	Jewellery and Precious metal Workers	cutting designs in moulds or other materials to be used as models in the fabrication of metal and jewellery products;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	altering existing jewellery mountings in order to reposition jewels or to adjust mountings;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	repairing, reshaping and restyling old jewellery or precious metal ware following designs or instructions;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	making complete jewellery articles such as rings, necklaces, bangles, brooches and bracelets from materials such as gold, silver, platinum and precious or semi-precious stones;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	examining gem surfaces and internal structures, using polariscopes, refractometers, microscopes and other optical instruments to differentiate between stones, to identify rare specimens, or to detect flaws, defects or peculiarities affecting gem values;	Routine cognitive
7313	Jewellery and Precious metal Workers	cutting and polishing gems and setting them in jewellery articles;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	engraving or embossing letters, designs or decorative lines on jewellery and precious metal ware;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	grinding, drilling and finishing jewel bearings for use in precision instruments such as compasses and chronometers;	Non-routine manual physical
7313	Jewellery and Precious metal Workers	examining assembled or finished products to ensure conformity with specifications, using magnifying glasses or precision measuring instruments.	Routine cognitive

7315	Glass Makers, Cutters, Grinders and Finishers	(a) heating glass to pliable stage using gas flames or ovens, and rotating glass to heat it uniformly;	Non-routine manual physical
7315	Glass Makers, Cutters, Grinders and Finishers	(b) blowing and bending glass tubing into specified shapes to form scientific apparatus such as flasks, retorts and pipettes;	Non-routine manual physical
7315	Glass Makers, Cutters, Grinders and Finishers	(c) 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 sanders or polishing wheels;	Non-routine manual physical
7315	Glass Makers, Cutters, Grinders and Finishers	(d) 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;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(e) reading work orders to determine dimensions, cutting locations and quantities to cut;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(f) observing gauges, computer printouts and video monitors to verify specified processing conditions and make adjustments as necessary;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(g) positioning patterns or drawings on glass, measuring dimensions, and marking cutting lines, using glass cutting tools and cutting glass along marked outlines or around pattern;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(h) setting up, operating and adjusting computerized or robotic glass cutting equipment;	Routine manual

7315	Glass Makers, Cutters, Grinders and Finishers	(i) inspecting, weighing and measuring products to verify conformity with specifications, using instruments such as micrometers, callipers, magnifiers and rulers;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(j) regulating oven temperatures according to glass types to be processed;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(k) transferring patterns for individual stained glass parts from full size drawings to pattern paper, using stylus to trace drawings;	Routine cognitive
7315	Glass Makers, Cutters, Grinders and Finishers	(l) spraying silver solution on glass to provide mirrored surface, using spray guns;	Non-routine manual physical
7315	Glass Makers, Cutters, Grinders and Finishers	(m) 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.	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	preparing wood, straw, rattan, reeds, shells or similar materials;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	carving floral and artistic designs on wooden surfaces for decorative purposes;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	painting freehand decorative designs on glass and pottery or porcelain ware;	Non-routine manual physical

7317	Handicraft Workers in Wood, Basketry and Related Materials	carving, assembling, weaving, painting and decorating various articles for personal or household use such as salad bowls, serving spoons, cutting-boards, trays, vases, jugs, baskets, straw hats, straw mats and similar objects;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	carving, assembling, weaving and painting various decorative articles such as statues and other sculptures, chess pieces, jewellery and similar objects;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	making wicker furniture from peeled and softened rattan, reeds, rushes, willow branches and similar materials;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	making various kinds of baskets by interlacing osier, rattan, reeds, rushes and similar materials;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	forming bottoms of baskets by interlacing strips of rattan, wood veneer or other materials with frameworks of rods of material such as willow;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	inserting rods around bottom edges between woven sections of bottom and bending them upright to serve as framework for sides;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	selecting and preparing brush materials such as bristles, nylon, fibres and wire, and setting them in brush base;	Non-routine manual physical
7317	Handicraft Workers in Wood, Basketry and Related Materials	selecting and preparing materials such as broom corn, bass, whisker and fibre, and fastening them to broom handles.	Non-routine manual physical

7318	Handicraft Workers in Textile, Leather and Related Materials	(a) spinning and dyeing with natural dyestuffs, wool, cotton and other fibres;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(b) lace-making, and weaving, knitting or embroidering various garments and articles for household use;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(c) preparing and dyeing hides with natural dyestuffs and making traditional footwear or handbags, belts and other accessories;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(d) spinning and winding yarn by hand;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(e) drawing warp threads into looms by hand;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(f) weaving plain or figured cloth, tapestry, lace, carpets or other fabrics on hand looms;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(g) making carpets by using a knotting technique;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(h) knitting garments and other articles on hand-operated machines or by hand;	Non-routine manual physical

7318	Handicraft Workers in Textile, Leather and Related Materials	(i) crocheting or making braid by hand;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(j) making nets by hand;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(k) grading and classifying natural textile fibres;	Routine cognitive
7318	Handicraft Workers in Textile, Leather and Related Materials	(l) washing wool fibres;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(m) cleaning and fluffing textile fibres;	Non-routine manual physical
7318	Handicraft Workers in Textile, Leather and Related Materials	(n) forming fibres into sliver, combing them, combining sliver into sliver laps or forming sliver into rove.	Non-routine manual physical
7319	Handicraft Workers Not Elsewhere Classified	cannot be determined	#N/A
7322	Printers	(a) setting, adjusting and monitoring substrate-feed mechanisms, delivery mechanisms, inking systems and other printing machine functions;	Routine cognitive
7322	Printers	(b) mixing ink and solvents to standard, and regulating paper and ink supply during print runs;	Routine cognitive

7322	Printers	(c) monitoring, evaluating and determining press to check print quality standards against proofs and detect malfunctions;	Routine cognitive
7322	Printers	(d) producing a variety of printed products using digital, relief, lithographic, flexographic and gravure printing presses, and in-line finishing systems;	Routine cognitive
7322	Printers	(e) preparing plates, blankets and impression cylinders on small offset lithographic printing presses;	Routine manual
7322	Printers	(f) loading paper into feeding mechanisms;	Routine manual
7322	Printers	(g) monitoring machine operations and quality of printing;	Routine cognitive
7322	Printers	(h) maintaining, adjusting, repairing and cleaning machines;	Non-routine manual physical
7322	Printers	(i) producing digital print images, and transferring and outputting images.	Routine cognitive
7323	Print Finishing and Binding Workers	(a) setting up and supervising the operation of automatic binding and finishing equipment;	Non-routine interpersonal
7323	Print Finishing and Binding Workers	(b) binding full, half and limp-bound books, and repairing bindings;	Non-routine manual physical
7323	Print Finishing and Binding Workers	(c) folding, collating and sewing signatures by machine and hand;	Routine manual
7323	Print Finishing and Binding Workers	(d) operating paper guillotines for pre-press and post-press paper cutting and trimming, and programming electronically operated units;	Routine manual
7323	Print Finishing and Binding Workers	(e) operating systems to insert printed material into newspapers, magazines and envelopes;	Routine manual



7323	Print Finishing and Binding Workers	(f) embellishing printed products automatically and manually;	Routine manual
7323	Print Finishing and Binding Workers	(g) operating photographic and electronic reproduction devices.	Routine manual
7411	Building and Related Electricians	installing, maintaining and repairing electrical wiring systems and related equipment in various buildings such as schools, hospitals, commercial establishments, residential buildings and other structures;	Non-routine manual physical
7411	Building and Related Electricians	examining blueprints, wiring diagrams and specifications to determine sequences and methods of operation;	Non-routine analytical
7411	Building and Related Electricians	planning layout and installation of electrical wiring, equipment and fixtures, based on job specifications and relevant standards;	Non-routine analytical
7411	Building and Related Electricians	inspecting electrical systems, equipment, and components to identify hazards, defects, and the need for adjustment or repair;	Non-routine manual physical
7411	Building and Related Electricians	selecting, cutting and connecting wire and cable to terminals and connectors;	Non-routine manual physical
7411	Building and Related Electricians	measuring and laying out installation reference points;	Routine cognitive
7411	Building and Related Electricians	positioning and installing electrical switchboards;	Non-routine manual physical
7411	Building and Related Electricians	testing continuity of circuits.	Routine cognitive

7412	Electrical Mechanics and Fitters	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;	Non-routine manual physical
7412	Electrical Mechanics and Fitters	fitting, adjusting and repairing electrical parts in domestic appliances, industrial machines and other appliances;	Non-routine manual physical
7412	Electrical Mechanics and Fitters	inspecting and testing manufactured electrical products;	Routine cognitive
7412	Electrical Mechanics and Fitters	installing, testing, connecting, commissioning, maintaining and modifying electrical equipment, wiring and control systems;	Non-routine manual physical
7412	Electrical Mechanics and Fitters	designing, installing, maintaining, servicing and repairing electric and hydraulic passenger and freight lifts, escalators, moving walkways and other lift equipment;	Non-routine manual physical
7412	Electrical Mechanics and Fitters	connecting electrical systems to the power supply;	Routine cognitive
7412	Electrical Mechanics and Fitters	replacing and repairing defective parts.	Non-routine manual physical
7413	Electrical Line Installers and Repairers	installing and repairing overhead and underground electrical power and electrical traction lines;	Non-routine manual physical
7413	Electrical Line Installers and Repairers	making joints in overhead and underground cables;	Non-routine manual physical
7413	Electrical Line Installers and Repairers	adhering to safety practices and procedures, such as checking equipment regularly and erecting barriers around work areas;	Routine cognitive

7413	Electrical Line Installers and Repairers	opening switches or attaching grounding devices to remove electrical hazards from disturbed or fallen lines or to facilitate repairs;	Non-routine manual physical
7413	Electrical Line Installers and Repairers	climbing poles or using truck-mounted buckets to access equipment;	Non-routine manual physical
7413	Electrical Line Installers and Repairers	identifying defective sectionalizing devices, circuit breakers, fuses, voltage regulators, transformers, switches, relays or wiring, using wiring diagrams and electrical-testing instruments.	Non-routine analytical
7421	Electronics Mechanics and Servicers	examining and testing machines, instruments, components, control systems and other electronic equipment to identify faults;	Non-routine analytical
7421	Electronics Mechanics and Servicers	adjusting, repairing and replacing worn and defective parts and wiring, and maintaining machines, equipment and instruments;	Non-routine manual physical
7421	Electronics Mechanics and Servicers	reassembling, test operating and adjusting equipment;	Routine manual
7421	Electronics Mechanics and Servicers	installing electronic instruments and control systems;	Non-routine manual physical
7421	Electronics Mechanics and Servicers	coordinating work with that of engineers, technicians and other maintenance personnel;	Non-routine interpersonal
7421	Electronics Mechanics and Servicers	interpreting test data to diagnose malfunctions and systemic performance problems;	Non-routine analytical
7421	Electronics Mechanics and Servicers	installing, adjusting, repairing or replacing electrical and electronic components, assemblies and systems, using hand tools, power tools or soldering irons;	Non-routine manual physical

7421	Electronics Mechanics and Servicers	connecting components to assemblies such as radio systems, instruments, magnetos, inverters and in-flight refuelling systems;	Non-routine manual physical
7421	Electronics Mechanics and Servicers	keeping records of maintenance and repair work.	Routine cognitive
7422	Information and Communications Technology Installers and Servicers	maintaining, troubleshooting, testing and repairing computers, data transmission equipment and computer peripherals;	Non-routine manual physical
7422	Information and Communications Technology Installers and Servicers	fitting and adjusting computer hardware;	Non-routine manual physical
7422	Information and Communications Technology Installers and Servicers	installing, maintaining, repairing and diagnosing malfunctions of microwave, telemetry, multiplexing, satellite and other radio and electromagnetic wave communications systems;	Non-routine manual physical
7422	Information and Communications Technology Installers and Servicers	providing technical advice and information, and monitoring the performance of complex telecommunications networks and equipment;	Routine cognitive
7422	Information and Communications Technology Installers and Servicers	installing and repairing cabling for computer, radio, telephone and television transmission;	Non-routine manual physical
7422	Information and Communications Technology Installers and Servicers	joining telecommunications and data cables, and sealing sheathes;	Non-routine manual physical

7422	Information and Communications Technology Installers and Servicers	installing, maintaining and repairing antennae used in communications.	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	slaughtering animals;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	flaying and trimming carcasses;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	boning, cutting and dressing meat and fish for sale or further processing;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	preparing ingredients and making sausages and similar products using chopping, mixing and shaping machines;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	curing meat, fish and other foods;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	operating smokehouses or ovens to smoke meat, fish and other foodstuffs;	Routine manual
7511	Butchers, Fishmongers and Related Food Preparers	cooking or in other ways preparing meat, fish and related food items for sale;	Non-routine manual physical
7511	Butchers, Fishmongers and Related Food Preparers	selling meat or fish to customers, including wrapping, weighing and labelling products, and receiving payment.	Routine cognitive
7512	Bakers, Pastry-cooks and Confectionery Makers	making bread, cakes, biscuits, pastries, pies and other flour products;	Non-routine manual physical

7512	Bakers, Pastry-cooks and Confectionery Makers	making handmade confectionery from mixtures of sugar, chocolate and other ingredients, using hand tools and some machines;	Non-routine manual physical
7512	Bakers, Pastry-cooks and Confectionery Makers	combining measured ingredients in bowls of mixing, blending or cooking machinery;	Non-routine manual physical
7512	Bakers, Pastry-cooks and Confectionery Makers	checking the quality of raw materials to ensure that standards and specifications are met;	Routine cognitive
7512	Bakers, Pastry-cooks and Confectionery Makers	applying glazes, icings or other toppings to baked goods, using spatulas or brushes;	Non-routine manual physical
7512	Bakers, Pastry-cooks and Confectionery Makers	checking the cleanliness of equipment and operation of premises before production runs to ensure compliance with occupational health and safety regulations;	Routine cognitive
7512	Bakers, Pastry-cooks and Confectionery Makers	monitoring oven temperatures and product appearance to determine baking times;	Routine cognitive
7512	Bakers, Pastry-cooks and Confectionery Makers	coordinating the forming, loading, baking, unloading, de-panning and cooling of batches of bread, rolls, pastry and confectionery products.	Non-routine interpersonal
7513	Dairy Products Makers	(a) boiling or pasteurizing milk to achieve specified butter fat content;	Non-routine manual physical
7513	Dairy Products Makers	(b) separating cream from milk and churning cream into butter;	Non-routine manual physical
7513	Dairy Products Makers	(c) dumping measured amounts of starter and other ingredients into milk;	Routine manual
7513	Dairy Products Makers	(d) curdling milk, heating curd until it reaches desired firmness, draining curd and	Non-routine manual physical

		placing cheese into moulds to press it into shape;	
7513	Dairy Products Makers	(e) salting cheese and piercing or smearing cheese with cultured wash to develop mould growth;	Non-routine manual physical
7513	Dairy Products Makers	(f) placing and turning cheese blocks on shelves to cure cheese;	Non-routine manual physical
7513	Dairy Products Makers	(g) monitoring product quality before packaging by inspecting, taking samples and adjusting treatment conditions when necessary;	Routine cognitive
7513	Dairy Products Makers	(h) recording amounts of ingredients used, test results and time cycles.	Routine cognitive
7514	Fruit, Vegetable and Related Preservers	(a) extracting juices from various fruits;	Non-routine manual physical
7514	Fruit, Vegetable and Related Preservers	(b) extracting oils from oil-bearing seeds, nuts or fruits;	Non-routine manual physical
7514	Fruit, Vegetable and Related Preservers	(c) cooking, salting or drying fruit, vegetables and related foods;	Non-routine manual physical
7514	Fruit, Vegetable and Related Preservers	(d) mixing and adding ingredients such as pectin, sugar, spices and vinegar to assist preservation and enhance texture, appearance and flavour;	Non-routine manual physical
7514	Fruit, Vegetable and Related Preservers	(e) transferring preserved foods to sterile jars, bottles or other containers.	Non-routine manual physical
7522	Cabinet-makers and Related Workers	(a) operating woodworking machines such as power saws, jointers, mortisers and shapers, and using hand tools to cut, shape and form parts and components;	Routine manual

7522	Cabinet-makers and Related Workers	(b) 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;	Non-routine analytical
7522	Cabinet-makers and Related Workers	(c) 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;	Non-routine manual physical
7522	Cabinet-makers and Related Workers	(d) making, restyling and repairing various wooden articles such as cabinets, furniture, vehicles, scale models, sports equipment and other parts or products;	Non-routine manual physical
7522	Cabinet-makers and Related Workers	(e) decorating furniture and fixtures by inlaying wood or applying veneer and carving designs;	Non-routine manual physical
7522	Cabinet-makers and Related Workers	(f) finishing surfaces of wooden articles or furniture.	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	making overcoats, suits, skirts, shirts, blouses, lingerie, corsetry, hats, wigs and similar garments, often to clients' individual requirements;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	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 the pattern according to the design of the garment;	Routine cognitive
7531	Tailors, Dressmakers, Furriers and Hatters	making garment style changes, such as tapering trouser legs or narrowing lapels, and adding or removing padding;	Non-routine manual physical



7531	Tailors, Dressmakers, Furriers and Hatters	selecting and modifying commercial patterns to customers' and clothing manufacturers' specifications and fit;	Routine cognitive
7531	Tailors, Dressmakers, Furriers and Hatters	fitting, altering and repairing tailored clothing, dresses, coats and other made-to-measure garments according to customers' requests;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	making and caring for costumes used in theatrical, television and motion picture productions;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	folding, twisting and draping material such as satin or silk, or sewing ribbon or cloth in the form of artificial flowers or bows around crown and brim to shape and decorate hats;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	sewing and fastening together materials and hair strands to make wigs;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	blending shades of hair to give a natural appearance to wigs, arranging woven hair in specified positions and sewing hair together to form hairpieces;	Routine cognitive
7531	Tailors, Dressmakers, Furriers and Hatters	making, altering, restyling and repairing fur garments and other fur articles;	Non-routine manual physical
7531	Tailors, Dressmakers, Furriers and Hatters	reclaiming furs or skins from old coats, gluing fabric to the interior of fur coats and trimming fur garments.	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(a) creating a master pattern for each size within a range of garment sizes, using charts, drafting instruments, computers and/or grading devices;	Routine cognitive

7532	Garment and Related Patternmakers and Cutters	(b) creating the blueprint or pattern pieces for a particular apparel design with the aid of a computer;	Routine cognitive
7532	Garment and Related Patternmakers and Cutters	(c) calculating dimensions of patterns according to sizes, considering stretching of material;	Routine cognitive
7532	Garment and Related Patternmakers and Cutters	(d) drawing details on outlined parts to indicate where 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;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(e) positioning templates or measuring materials to locate specified points of cuts or to obtain maximum yields, and marking fabric accordingly;	Routine cognitive
7532	Garment and Related Patternmakers and Cutters	(f) laying out the master pattern on fabric and cutting sample patterns;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(g) testing patterns by making and fitting sample garments;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(h) 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;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(i) cutting fabric or fur pelts to make parts for garments and other fur articles;	Non-routine manual physical

7532	Garment and Related Patternmakers and Cutters	(j) trimming excess material or cutting threads off finished products, such as cutting loose ends of a finished product;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(k) positioning leather on the cutting bed of machines, maximizing usage according to skin grain, skin flaws and skin stretch;	Non-routine manual physical
7532	Garment and Related Patternmakers and Cutters	(l) performing patternmaking, marking and cutting tasks in the manufacture of other products such as soft furnishings and canvas goods.	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(a) repairing defective or damaged portions of cloths or garments by hand, using matching thread and needle;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(b) removing stitches from garments to be altered, using rippers or razor blades;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(c) selecting thread according to specifications or colour of parts, or dyeing thread to match colour and shade of cloth to be darned;	Routine cognitive
7533	Sewing, Embroidery and Related Workers	(d) patching holes, sewing tears and ripped seams, or darning defects in items, using needle and thread;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(e) pulling knots to the wrong sides of garments, using hooks;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(f) trimming ends with scissors to make mended portions look uniform with the pattern of cloth;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(g) sewing ornamental designs by hand over stamped, printed or stencilled patterns on fabric, using needle and coloured thread;	Non-routine manual physical

7533	Sewing, Embroidery and Related Workers	(h) embroidering ornamental designs on cloth by hand or machine, using needle and coloured thread;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(i) softening leather or shoe material with water to prepare it for sewing;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(j) sewing or gluing decorative trimmings to articles such as hats, caps or other millinery;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(k) hand-sewing umbrella covers to frames, tacking cover to ribs along seams, sewing corners to tips of ribs and sewing ties to outside of cover to hold umbrella when folded;	Non-routine manual physical
7533	Sewing, Embroidery and Related Workers	(l) fabricating and assembling thick cloth, canvas and similar materials into sails, awning, tarpaulins and tents.	Non-routine manual physical
7536	Shoemakers and Related Workers	making, modifying and repairing standard footwear to meet individual requirements;	Non-routine manual physical
7536	Shoemakers and Related Workers	making, modifying and repairing orthopaedic or therapeutic footwear according to doctors' prescriptions, or modifying existing footwear for people with foot problems and special needs;	Non-routine manual physical
7536	Shoemakers and Related Workers	repairing belts, luggage, purses and similar products;	Non-routine manual physical
7536	Shoemakers and Related Workers	taking plaster casts of deformed legs or feet to prepare drawings;	Non-routine manual physical
7536	Shoemakers and Related Workers	preparing inserts, heel pads and lifts from casts of customers' feet;	Non-routine manual physical

7536	Shoemakers and Related Workers	studying drawings and other specifications to make footwear according to customers' needs;	Non-routine analytical
7536	Shoemakers and Related Workers	studying work orders and/or shoe part tags to obtain information about workloads, specifications and the types of materials to be used;	Non-routine analytical
7536	Shoemakers and Related Workers	checking the texture, colour and strength of leather to ensure that it is adequate for a particular purpose;	Routine cognitive
7536	Shoemakers and Related Workers	cutting out, shaping and padding parts for making leather articles;	Non-routine manual physical
7536	Shoemakers and Related Workers	sewing rips or patching holes to repair articles such as purses, belts, shoes and luggage;	Non-routine manual physical
7536	Shoemakers and Related Workers	removing and examining shoes, shoe parts and designs to verify conformity with specifications, such as proper embedding of stitches in channels;	Routine cognitive
7536	Shoemakers and Related Workers	attaching accessories or ornamentation to decorate or protect products;	Non-routine manual physical
7536	Shoemakers and Related Workers	making and repairing articles such as saddles and harnesses for animals, luggage, handbags, briefcases, leather bags, belts and other accessories.	Non-routine manual physical
7543	Product Graders and Testers (excluding Foods and Beverages)	inspecting and testing products, parts and materials for conformity with specifications and standards;	Routine cognitive

7543	Product Graders and Testers (excluding Foods and Beverages)	grading and classifying natural textile fibres for spinning and winding;	Routine cognitive
7543	Product Graders and Testers (excluding Foods and Beverages)	discarding or rejecting products, materials and equipment not meeting specifications;	Routine cognitive
7543	Product Graders and Testers (excluding Foods and Beverages)	analysing and interpreting blueprints, data, manuals and other materials to determine specifications, inspection and testing procedures;	Non-routine analytical
7543	Product Graders and Testers (excluding Foods and Beverages)	notifying supervisors and other personnel of production problems, and assisting in identifying and correcting these problems;	Non-routine interpersonal
7543	Product Graders and Testers (excluding Foods and Beverages)	recording inspection or test data such as weights, temperatures, grades or moisture content, and quantities inspected or graded;	Routine cognitive
7543	Product Graders and Testers (excluding Foods and Beverages)	marking items with details such as grade and acceptance or rejection status;	Routine cognitive
7543	Product Graders and Testers (excluding Foods and Beverages)	measuring dimensions of products using instruments such as rulers, calipers, gauges or micrometers;	Routine cognitive

7543	Product Graders and Testers (excluding Foods and Beverages)	analysing test data and making computations as necessary to determine test results.	Non-routine analytical
7544	Fumigators and Other Pest and Weed Controllers	operating and monitoring equipment for spraying pests and weeds;	Routine manual
7544	Fumigators and Other Pest and Weed Controllers	mixing chemicals according to instructions;	Routine cognitive
7544	Fumigators and Other Pest and Weed Controllers	covering areas to specified depths with pesticides, applying knowledge of weather conditions, droplet sizes, elevation-to-distance ratios, and obstructions;	Non-routine manual physical
7544	Fumigators and Other Pest and Weed Controllers	spraying or releasing chemical solutions or toxic gases, and setting traps to kill pests and vermin, such as mice, termites and roaches;	Non-routine manual physical
7544	Fumigators and Other Pest and Weed Controllers	lifting, pushing and swinging nozzles, hoses and tubes in order to direct spray over designated areas;	Non-routine manual physical
7544	Fumigators and Other Pest and Weed Controllers	filling sprayer tanks with water and chemicals;	Non-routine manual physical
7544	Fumigators and Other Pest and Weed Controllers	cleaning and servicing machinery to ensure operating efficiency.	Non-routine manual physical
8111	Miners and Quarriers	(a) positioning, operating and monitoring the performance of a variety of underground and surface mining equipment including continuous mining, cutting and channelling plant;	Routine manual

8111	Miners and Quarriers	(b) setting up and operating drilling equipment in underground and surface mines and quarries;	Routine manual
8111	Miners and Quarriers	(c) operating machinery and using hand or power tools to remove loosened rock, ore, coal and other deposits;	Routine manual
8111	Miners and Quarriers	(d) preparing, fitting and installing supports in underground workings including rock bolts;	Non-routine manual physical
8111	Miners and Quarriers	(e) operating machinery to open new shafts, drives, air vents and rises;	Routine manual
8111	Miners and Quarriers	(f) operating auxiliary plant such as pumps to expel air, water and mud;	Routine manual
8111	Miners and Quarriers	(g) performing minor maintenance and repairs and lubricating and cleaning plant, machines and tools;	Non-routine manual physical
8111	Miners and Quarriers	(h) completing records detailing operations completed during shifts;	Routine cognitive
8111	Miners and Quarriers	(i) collecting mineral samples for laboratory analysis.	Non-routine manual physical
8113	Well Drillers and Boreers and Related Workers	(a) dismantling, moving and assembling drilling rigs and auxiliary equipment;	Non-routine manual physical
8113	Well Drillers and Boreers and Related Workers	(b) assembling and dismantling pipes, casings and drill heads, and replacing dysfunctional equipment;	Non-routine manual physical
8113	Well Drillers and Boreers and Related Workers	(c) operating controls to lower and raise drill pipes and casings in and out of wells, regulate pressure in the well and control the speed of tools;	Routine manual
8113	Well Drillers and Boreers and Related Workers	(d) preparing drilling fluid and checking the operation of pumps to ensure adequate circulation of fluid in drill pipes and wells;	Routine manual



8113	Well Drillers and Borers and Related Workers	(e) monitoring gauges and other indicators, listening to equipment to detect malfunctions and unusual well conditions, and determining the need to change drilling or equipment;	Routine cognitive
8113	Well Drillers and Borers and Related Workers	(f) maintaining, adjusting, repairing and cleaning drilling rigs, hoisting and other machinery;	Non-routine manual physical
8113	Well Drillers and Borers and Related Workers	(g) maintaining records of drilling and servicing operations;	Routine cognitive
8113	Well Drillers and Borers and Related Workers	(h) operating machines and tools to extract dust, cuttings and lost and broken drilling equipment from holes and wells;	Routine manual
8113	Well Drillers and Borers and Related Workers	(i) closing and sealing wells no longer in use;	Routine manual
8113	Well Drillers and Borers and Related Workers	(j) supervising and train crew members.	Non-routine interpersonal
8114	Cement, Stone and Other Mineral Products Machine Operators	operating extrusion, moulding, mixing, pumping, compacting, grinding and cutting machinery to manufacture and finish precast concrete and stone products;	Routine manual
8114	Cement, Stone and Other Mineral Products Machine Operators	operating plant to produce cement, lime and clinker, including loading and unloading ingredients and operating continuous feed equipment such as pumps and conveyors;	Routine manual

8114	Cement, Stone and Other Mineral Products Machine Operators	operating plant and machines which weigh and mix sand, gravel, cement, water and other ingredients to make concrete;	Routine manual
8114	Cement, Stone and Other Mineral Products Machine Operators	operating plant and machinery which assemble and fill moulds with concrete and artificial stone mixtures, remove castings from moulds and finish surfaces of precast products;	Routine manual
8114	Cement, Stone and Other Mineral Products Machine Operators	cutting, grinding, drilling, sandblasting and polishing concrete products and stone blocks, slabs and products to the specifications for the job;	Non-routine manual physical
8114	Cement, Stone and Other Mineral Products Machine Operators	checking production plans and specifications to determine and select materials, ingredients, procedures, components, settings and adjustments for extrusion, moulding, mixing and compacting machines;	Routine cognitive
8114	Cement, Stone and Other Mineral Products Machine Operators	monitoring plant and machines during operation by observing instruments such as temperature and pressure gauges, adjusting controls and reporting malfunctions as necessary;	Routine manual
8114	Cement, Stone and Other Mineral Products Machine Operators	collecting and examining samples of mixtures and finished products for conformity with specifications and adjusting machine settings accordingly;	Non-routine analytical

8114	Cement, Stone and Other Mineral Products Machine Operators	checking and maintaining production records, including information about quantities, dimensions and types of materials and goods produced;	Routine cognitive
8114	Cement, Stone and Other Mineral Products Machine Operators	arranging and assisting with plant and machinery maintenance and repair.	Non-routine manual physical
8121	Metal Processing Plant Operators	setting up, preparing and adjusting mineral ore and metal processing machinery to carry out one step in the overall mineral ore or metal processing operation;	Routine manual
8121	Metal Processing Plant Operators	operating single-function machinery to grind, separate, filter, mix, treat, cast, roll, refine or otherwise process metals and mineral ores;	Routine manual
8121	Metal Processing Plant Operators	observing gauges, meters, computer printouts, video monitors and products to ensure the correct operation of machines and verify specified processing conditions;	Routine cognitive
8121	Metal Processing Plant Operators	adjusting equipment, valves, pumps, controls and process equipment;	Non-routine manual physical
8121	Metal Processing Plant Operators	controlling the preparation, measuring and feeding of raw materials and processing agents into the plant;	Routine manual
8121	Metal Processing Plant Operators	controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment;	Routine manual
8121	Metal Processing Plant Operators	verifying equipment for malfunctions, carrying out routine operating tests and arranging for maintenance;	Routine manual

8121	Metal Processing Plant Operators	analysing sample products, performing tests, recording data and writing production logs.	Non-routine analytical
8122	Metal Finishing, Plating and Coating Machine Operators	(a) operating and monitoring equipment which cleans metal articles in preparation for electroplating, galvanizing, enamelling or similar processes;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(b) operating and monitoring electroplating equipment;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(c) operating and monitoring hot-dip equipment used to coat iron and steel products;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(d) operating and monitoring machines which automatically coat wire with non-ferrous metal;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(e) operating and monitoring equipment used to spray molten metal or other substances onto metal products to provide a protective or decorative coating or to build up worn or damaged surfaces;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(f) operating and monitoring equipment used to impart a rust-resistant finish to metal articles by treating them with chemicals and heating them;	Routine manual
8122	Metal Finishing, Plating and Coating Machine Operators	(g) checking proper thickness of plating using micrometers, callipers or other devices, recording data and writing production logs;	Routine cognitive

8122	Metal Finishing, Plating and Coating Machine Operators	(h) preparing and mixing metallizing solutions according to formulas or specifications.	Routine cognitive
8131	Chemical Products Plant and Machine Operators	(a) setting up, starting, controlling, adjusting and stopping machines and plant;	Routine manual
8131	Chemical Products Plant and Machine Operators	(b) monitoring reaction processes and transfers of products in conformity with safety procedures;	Routine cognitive
8131	Chemical Products Plant and Machine Operators	(c) monitoring meters, gauges and electronic instrumentation on one or more chemical or formulation units, such as mixers, kettles, blenders, dryers, or tableting, encapsulation, granulation and coating machines;	Routine cognitive
8131	Chemical Products Plant and Machine Operators	(d) measuring, weighing and loading chemical ingredients following formulation cards;	Routine cognitive
8131	Chemical Products Plant and Machine Operators	(e) making samples and performing routine chemical and physical tests of products and recording production data;	Routine cognitive
8131	Chemical Products Plant and Machine Operators	(f) cleaning and performing minor repairs to machines and plant.	Non-routine manual physical
8141	Rubber Products Machine Operators	operating and monitoring machines which knead, mix and blend rubber and rubber compounds for further processing;	Routine manual
8141	Rubber Products Machine Operators	operating and monitoring machines which produce sheets of rubber or rubberized fabric by a rolling process;	Routine manual

8141	Rubber Products Machine Operators	operating and monitoring machines which extrude compounded rubber or shape vulcanized rubber by moulding;	Routine manual
8141	Rubber Products Machine Operators	operating and monitoring machines which build up tyres on a form, vulcanize tyres and mould or rebuild used tyres;	Routine manual
8141	Rubber Products Machine Operators	examining outputs for defects and conformity to specifications;	Routine cognitive
8141	Rubber Products Machine Operators	locating defects and repairing worn and faulty tyres by vulcanizing or other processes.	Non-routine manual physical
8142	Plastic Products Machine Operators	operating and monitoring machines which knead and blend compounds to obtain plastic materials;	Routine manual
8142	Plastic Products Machine Operators	operating and monitoring machines which shape plastic materials by moulding, extrusion, blowing, cutting and other means;	Routine manual
8142	Plastic Products Machine Operators	operating and monitoring machines which laminate plastics and plastic-impregnated materials or produce fibreglass;	Routine manual
8142	Plastic Products Machine Operators	encasing uncoated wire, cord, cable and optic fibre in plastic;	Non-routine manual physical
8142	Plastic Products Machine Operators	examining outputs for defects and conformity to specifications;	Routine cognitive
8142	Plastic Products Machine Operators	recycling waste plastic materials;	Non-routine manual physical
8142	Plastic Products Machine Operators	making artificial eyes and contact lens discs, making and repairing spectacle frames and plastic parts of orthopaedic appliances.	Non-routine manual physical

8143	Paper Products Machine Operators	(a) 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;	Routine manual
8143	Paper Products Machine Operators	(b) operating and monitoring pressing machines which form drinking cups or other containers from paper, paperboard or cardboard;	Routine manual
8143	Paper Products Machine Operators	(c) operating and monitoring machines which cut, fold and glue paper to make envelopes and paper bags, or which form bags from other similar material.	Routine manual
8152	Weaving and Knitting Machine Operators	(a) setting up and operating batteries of automatic, link-type knitting machines to knit garments of specified pattern and design;	Routine manual
8152	Weaving and Knitting Machine Operators	(b) threading yarn, thread and fabric through guides, needles and rollers of machines for weaving, knitting or other processing;	Routine manual
8152	Weaving and Knitting Machine Operators	(c) tending automatic looms that simultaneously weave pile yarn, filling yarn and warp yarn material to produce carpets and rugs with various coloured designs;	Routine manual
8152	Weaving and Knitting Machine Operators	(d) operating and monitoring looms on which yarn or twist is intersected and knotted at regular intervals to form mesh;	Routine manual
8152	Weaving and Knitting Machine Operators	(e) 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;	Routine manual

8152	Weaving and Knitting Machine Operators	(f) tending circular knitting machines with automatic pattern controls that knit seamless hose;	Routine manual
8152	Weaving and Knitting Machine Operators	(g) operating and monitoring knitting machines to knit hosiery to shape of foot and leg;	Routine manual
8152	Weaving and Knitting Machine Operators	(h) operating and monitoring machines for knitting heels and toes of socks into ribs or tops cut from circular fabric;	Routine manual
8152	Weaving and Knitting Machine Operators	(i) operating and monitoring machines which seam openings in toes of socks;	Routine manual
8152	Weaving and Knitting Machine Operators	(j) operating and monitoring crochet machines to knit lace, trimming, etc. of desired patterns or design;	Routine manual
8152	Weaving and Knitting Machine Operators	(k) examining looms to determine causes of loom stoppage, such as warp filling, harness breaks or mechanical defects;	Routine cognitive
8152	Weaving and Knitting Machine Operators	(l) repairing or replacing worn or defective needles and other components;	Non-routine manual physical
8152	Weaving and Knitting Machine Operators	(m) cleaning, oiling and lubricating machines, using air hoses, cleaning solutions, rags, oil cans and/or grease guns.	Non-routine manual physical
8153	Sewing Machine Operators	(a) operating or tending sewing machines to perform garment sewing operations such as joining, reinforcing, seaming or decorating garments or garment parts;	Routine manual
8153	Sewing Machine Operators	(b) attaching buttons, hooks, zippers, fasteners or other accessories to fabric, using feeding hoppers or clamp holders;	Non-routine manual physical



8153	Sewing Machine Operators	(c) tending semiautomatic sewing machines with multiple-sewing heads controlled by pattern chains that embroider various designs on garments;	Routine manual
8153	Sewing Machine Operators	(d) operating machines such as single or double needle sergers and flat-bed felling machines to automatically join, reinforce or decorate material or articles;	Routine manual
8153	Sewing Machine Operators	(e) operating fur sewing machines to join fur pelt strips to required size and shape and join pelts into garment sections or shells;	Routine manual
8153	Sewing Machine Operators	(f) operating stitching machines to sew leather parts together for leather garments, handbags, gloves or similar items;	Routine manual
8153	Sewing Machine Operators	(g) monitoring machine operations to detect problems such as defective stitching, breaks in thread or machine malfunctions;	Routine cognitive
8153	Sewing Machine Operators	(h) performing equipment maintenance tasks such as replacing needles.	Non-routine manual physical
8157	Laundry Machine Operators	(a) sorting articles for cleaning according to the type, colour, fabric and cleaning treatment required;	Routine cognitive
8157	Laundry Machine Operators	(b) placing sorted articles into receptacles and onto conveyor belts for moving to repair and cleaning areas;	Routine manual
8157	Laundry Machine Operators	(c) checking and removing stains from garments, replacing buttons and making minor repairs;	Non-routine manual physical
8157	Laundry Machine Operators	(d) loading and unloading washing machines, driers and extractors;	Routine manual

8157	Laundry Machine Operators	(e) adding cleaning agents and starches to articles;	Routine manual
8157	Laundry Machine Operators	(f) smoothing articles and guiding them through cleaning and pressing machines;	Routine manual
8157	Laundry Machine Operators	(g) stopping and starting machines to untangle, straighten and remove articles;	Routine manual
8157	Laundry Machine Operators	(h) placing articles on shelves and hanging articles for delivery and collection;	Routine manual
8157	Laundry Machine Operators	(i) packaging articles and preparing orders for despatch.	Routine manual
8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	(a) operating and monitoring machines which form and make hats out of textiles, fur or leather;	Routine manual
8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	(b) operating and monitoring machines which make miscellaneous articles such as braids or other trimmings;	Routine manual
8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	(c) operating and monitoring machines which fold cloth into measured length;	Routine manual
8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	(d) operating and monitoring machines which wind thread, twine or yarn into balls preparatory to shipping or further processing;	Routine manual

8159	Textile, Fur and Leather Products Machine Operators Not Elsewhere Classified	(e) operating and monitoring machines to measure size of pieces of leather.	Routine manual
8160	Food and Related Products Machine Operators	operating and monitoring machinery used to restrain, stun and slaughter animals and to trim carcasses into standard meat and fish cuts;	Routine manual
8160	Food and Related Products Machine Operators	setting, operating and attending machinery and ovens to mix, bake and otherwise prepare bread and flour confectionery products;	Routine manual
8160	Food and Related Products Machine Operators	operating machinery to crush, mix, malt, cook and ferment grains and fruits to produce beer, wines, malt liquors, vinegar, yeast and related products;	Routine manual
8160	Food and Related Products Machine Operators	attending equipment to make jam, toffee, cheese, processed cheese, margarine, syrup, ice, pasta, ice-cream, sausages, chocolate, maize starch, edible fats and dextrin;	Routine manual
8160	Food and Related Products Machine Operators	operating equipment to cool, heat, dry, roast, blanch, pasteurize, smoke, sterilize, freeze, evaporate and concentrate foodstuffs and liquids used in food processing;	Routine manual
8160	Food and Related Products Machine Operators	mixing, pulping, grinding, blending and separating foodstuffs and liquids with churning, pressing, sieving, grinding and filtering equipment;	Routine manual

8160	Food and Related Products Machine Operators	processing tobacco leaves by machine to make cigarettes, cigars, pipe and other tobacco products.	Routine manual
8183	Packing, Bottling and Labelling Machine Operators	(a) operating and monitoring machines that weigh, wrap, seal and pack various products;	Routine manual
8183	Packing, Bottling and Labelling Machine Operators	(b) 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;	Routine manual
8183	Packing, Bottling and Labelling Machine Operators	(c) operating and monitoring machines that, by gluing or other methods, label products, packages and various containers.	Routine manual
8189	Stationary Plant and Machine Operators Not Elsewhere Classified	cannot be determined	#N/A
8211	Mechanical Machinery Assemblers	assembling and installing prefabricated parts or components to form subassemblies, mechanical machinery, engines and finished motor vehicles;	Non-routine manual physical
8211	Mechanical Machinery Assemblers	reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions;	Routine cognitive
8211	Mechanical Machinery Assemblers	recording production and operational data on specified forms;	Routine cognitive
8211	Mechanical Machinery Assemblers	inspecting and testing completed components and assemblies;	Routine cognitive

8211	Mechanical Machinery Assemblers	rejecting faulty assemblies and components.	Routine cognitive
8212	Electrical and Electronic Equipment Assemblers	assembling component parts and electrical and electronic systems and positioning, aligning and fastening units to assemblies, subassemblies or frames using hand or power tools, soldering and micro-welding equipment.;	Non-routine manual physical
8212	Electrical and Electronic Equipment Assemblers	reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions;	Routine cognitive
8212	Electrical and Electronic Equipment Assemblers	recording production and operational data on specified forms;	Routine cognitive
8212	Electrical and Electronic Equipment Assemblers	operating wire-coiling machines to wind wire coils used in electrical equipment and components such as registers, transformers, armature wires, electric motors and generators;	Routine manual
8212	Electrical and Electronic Equipment Assemblers	inspecting and testing completed components and assemblies, wiring installations and circuits, and rejecting faulty assembly components.	Routine cognitive
8219	Assemblers Not Elsewhere Classified	(a) assembling component parts and positioning, aligning and fastening units to assemblies, subassemblies or frames using hand or power tools, soldering and micro-welding equipment;	Non-routine manual physical
8219	Assemblers Not Elsewhere Classified	(b) reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions;	Routine cognitive

8219	Assemblers Not Elsewhere Classified	(c) recording production and operational data on specified forms;	Routine cognitive
8219	Assemblers Not Elsewhere Classified	(d) inspecting and testing components and completed assemblies;	Routine cognitive
8219	Assemblers Not Elsewhere Classified	(e) rejecting faulty products.	Routine cognitive
8321	Motorcycle Drivers	(a) driving and tending motorcycles or motorized tricycles to transport materials, goods and passengers;	Non-routine manual physical
8321	Motorcycle Drivers	(b) observing traffic rules and signals;	Non-routine manual physical
8321	Motorcycle Drivers	(c) cleaning and washing vehicles as well as performing maintenance and minor repairs;	Non-routine manual physical
8321	Motorcycle Drivers	(d) keeping a record of journeys;	Routine cognitive
8321	Motorcycle Drivers	(e) delivering messages.	Non-routine manual physical
8322	Car, Taxi and Van Drivers	driving and tending passenger vans, cars or taxis;	Non-routine manual physical
8322	Car, Taxi and Van Drivers	driving and tending cars, vans or small trucks to deliver mail or goods;	Non-routine manual physical
8322	Car, Taxi and Van Drivers	assisting passengers with handling of luggage;	Non-routine manual physical
8322	Car, Taxi and Van Drivers	collecting fares, payments for deliveries, or documents certifying deliveries;	Non-routine manual physical
8322	Car, Taxi and Van Drivers	operating telecommunications equipment to report location and availability, and following directions of control centre;	Routine manual
8322	Car, Taxi and Van Drivers	determining most appropriate route;	Routine cognitive
8322	Car, Taxi and Van Drivers	assisting physically challenged passengers;	Non-routine manual physical
8322	Car, Taxi and Van Drivers	operating equipment to facilitate the loading and unloading of physically challenged passengers.	Routine manual

8331	Bus and Tram Drivers	driving and tending motor buses, trolley buses or motor coaches to transport local or long-distance passengers, mail or goods;	Non-routine manual physical
8331	Bus and Tram Drivers	driving and tending street tramcars transporting passengers;	Non-routine manual physical
8331	Bus and Tram Drivers	opening and closing doors before or after passengers board or alight;	Routine manual
8331	Bus and Tram Drivers	assisting passengers with luggage;	Non-routine manual physical
8331	Bus and Tram Drivers	controlling lighting, heating and ventilation on buses and trams;	Non-routine manual physical
8331	Bus and Tram Drivers	observing traffic to ensure safe progress;	Non-routine manual physical
8331	Bus and Tram Drivers	collecting fares or verifying that passengers have the necessary ticket.	Non-routine manual physical
8332	Heavy Truck and Lorry Drivers	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;	Non-routine manual physical
8332	Heavy Truck and Lorry Drivers	determining the most appropriate routes;	Routine cognitive
8332	Heavy Truck and Lorry Drivers	ensuring that goods are stowed and securely covered to prevent loss and damage;	Routine cognitive
8332	Heavy Truck and Lorry Drivers	assisting with or carrying out loading or unloading operations, using various lifting or tipping devices;	Non-routine manual physical
8332	Heavy Truck and Lorry Drivers	carrying out minor maintenance to vehicles, and arranging major maintenance and repairs;	Non-routine manual physical
8332	Heavy Truck and Lorry Drivers	estimating weights to comply with load limitations, and ensuring the safe distribution of weights.	Routine cognitive

8341	Mobile Farm and Forestry Plant Operators	driving and tending tractor-drawn or self-propelled special-purpose farm machinery to plough land and sow, fertilize, cultivate and harvest crops;	Non-routine manual physical
8341	Mobile Farm and Forestry Plant Operators	driving and tending tractor-drawn or self-propelled special-purpose forestry machinery to clear land, plant, harvest and carry trees and timber or perform other forestry operations;	Non-routine manual physical
8341	Mobile Farm and Forestry Plant Operators	preparing and positioning plant for operation;	Routine manual
8341	Mobile Farm and Forestry Plant Operators	adjusting speed, height and depth of implements;	Non-routine manual physical
8341	Mobile Farm and Forestry Plant Operators	operating plant to hold, lift and cut trees;	Routine manual
8341	Mobile Farm and Forestry Plant Operators	operating attachments to lift, swing, release and sort trees and logs, and operating auxiliary plant such as chipping machines and log splitting machines	Routine manual
8341	Mobile Farm and Forestry Plant Operators	feeding felled trees into processors to strip limbs and cut into logs and loading logs onto stockpiles and into trucks;	Routine manual
8341	Mobile Farm and Forestry Plant Operators	servicing machinery and performing minor repairs.	Non-routine manual physical
8342	Earthmoving and Related Plant Operators	operating and monitoring excavating machinery equipped with moveable shovels, grab-buckets or dragline buckets, to excavate and move earth, rock, sand, gravel or similar materials;	Routine manual



8342	Earthmoving and Related Plant Operators	operating and monitoring machinery for digging trenches for sewers, drainage, water, oil, gas or similar pipelines;	Routine manual
8342	Earthmoving and Related Plant Operators	operating and monitoring machinery equipped with concave steel blades to move, distribute and level earth, sand, snow and other materials;	Routine manual
8342	Earthmoving and Related Plant Operators	operating and monitoring equipment to remove sand, gravel and mud from bottom of body of water;	Routine manual
8342	Earthmoving and Related Plant Operators	operating and monitoring machines for hammering wooden, concrete or steel piles into ground;	Routine manual
8342	Earthmoving and Related Plant Operators	operating and monitoring power rollers to compact and smooth layers of materials in making roads and pavements, and similar work;	Routine manual
8342	Earthmoving and Related Plant Operators	operating and monitoring machines which spread and smooth concrete or bituminous or tar preparations to construct roadways, roads or similar surfaces.	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating and monitoring stationary or mobile cranes by raising and lowering jibs and booms to lift, move, position or place equipment and materials;	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating and monitoring equipment for hoisting, lowering or raising workers and materials on construction sites or in mines;	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating and monitoring ski-lifts and similar equipment;	Routine manual

8343	Crane, Hoist and Related Plant Operators	operating and monitoring machinery used to haul ferries or barges with goods, passengers and vehicles across short stretches of water;	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating and monitoring machinery to open and close bridges for the passage of road and water traffic;	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating and monitoring cranes equipped with dredging attachments to dredge waterways and other areas;	Routine manual
8343	Crane, Hoist and Related Plant Operators	operating cranes mounted on boats or barges to lift, move and place equipment and materials.	Routine manual
8344	Lifting Truck Operators	operating and monitoring lifting truck and similar equipment to load and unload, transport, lift and stack goods and pallets in terminals, harbours, warehouses, factories and other establishments;	Routine manual
8344	Lifting Truck Operators	positioning lifting devices under, over, or around loaded pallets, skids and boxes, and securing material or products for transport to designated areas;	Non-routine manual physical
8344	Lifting Truck Operators	inspecting equipment to identify wear and damage;	Routine cognitive
8344	Lifting Truck Operators	performing routine maintenance on vehicles and equipment;	Routine cognitive
8344	Lifting Truck Operators	keeping records of work undertaken and breakdowns of vehicles.	Routine cognitive
8350	Ships' Deck Crews and Related Workers	(a) standing look-out watches at sea and when entering or leaving harbour or other narrow waters;	Non-routine manual physical

8350	Ships' Deck Crews and Related Workers	(b) steering ships according to instructions;	Non-routine manual physical
8350	Ships' Deck Crews and Related Workers	(c) handling ropes and wires, and operating mooring equipment;	Non-routine manual physical
8350	Ships' Deck Crews and Related Workers	(d) maintaining and, in some cases, operating ships' equipment, cargo gear, rigging, lifesaving and firefighting appliances;	Non-routine manual physical
8350	Ships' Deck Crews and Related Workers	(e) performing deck and hull cleaning, scraping, painting and other maintenance duties as required;	Non-routine manual physical
8350	Ships' Deck Crews and Related Workers	(f) breaking out, rigging and stowing cargo-handling gear, stationary rigging and running gear.	Non-routine manual physical
9111	Domestic Cleaners and Helpers	sweeping, vacuum cleaning, polishing and washing floors and furniture, or washing windows and other fixtures;	Non-routine manual physical
9111	Domestic Cleaners and Helpers	washing, ironing and mending linen and other textiles;	Non-routine manual physical
9111	Domestic Cleaners and Helpers	washing dishes;	Non-routine manual physical
9111	Domestic Cleaners and Helpers	helping with preparation, cooking and serving of meals and refreshments;	Non-routine manual physical
9111	Domestic Cleaners and Helpers	purchasing food and various other household supplies;	Non-routine interpersonal
9111	Domestic Cleaners and Helpers	cleaning, disinfecting and deodorizing kitchens, bathrooms and toilets;	Non-routine manual physical
9111	Domestic Cleaners and Helpers	cleaning windows and other glass surfaces.	Non-routine manual physical

9112	Cleaners and Helpers in Offices, Hotels and Other Establishments	sweeping or vacuum cleaning, washing and polishing floors, furniture and other fixtures in buildings, coaches, buses, trams, trains and aircraft;	Non-routine manual physical
9112	Cleaners and Helpers in Offices, Hotels and Other Establishments	making beds, cleaning bathrooms, supplying towels, soap and related items;	Non-routine manual physical
9112	Cleaners and Helpers in Offices, Hotels and Other Establishments	cleaning kitchens and generally helping with kitchen work, including dishwashing;	Non-routine manual physical
9112	Cleaners and Helpers in Offices, Hotels and Other Establishments	picking up rubbish, emptying garbage containers and taking contents to waste areas to removal.	Non-routine manual physical
9121	Hand Launderers and Pressers	(a) laundering and pressing linen, clothing, fabrics and similar articles by hand in a laundry or other establishment;	Non-routine manual physical
9121	Hand Launderers and Pressers	(b) cleaning, by hand and with chemical solutions, clothing, fabrics, leather goods and similar articles, in a dry-cleaning or other establishment;	Non-routine manual physical
9121	Hand Launderers and Pressers	(c) replacing buttons and making minor repairs;	Non-routine manual physical
9121	Hand Launderers and Pressers	(d) placing articles on shelves and hanging articles for delivery and collection.	Non-routine manual physical
9122	Vehicle Cleaners	(a) cleaning, washing and polishing cars and other vehicles, by hand or using hand-held power tools;	Non-routine manual physical
9122	Vehicle Cleaners	(b) vacuuming vehicle interiors and dry-cleaning carpets and upholstery;	Non-routine manual physical

9122	Vehicle Cleaners	(c) applying cleaning agents to remove stains from vehicle exteriors and interiors;	Non-routine manual physical
9122	Vehicle Cleaners	(d) washing tyres and wheel arches and blackening tyres;	Non-routine manual physical
9122	Vehicle Cleaners	(e) washing and polishing vehicle windows;	Non-routine manual physical
9122	Vehicle Cleaners	(f) emptying and cleaning compartments in vehicles.	Non-routine manual physical
9129	Other Cleaning Workers	(a) cleaning carpets and upholstered furniture using cleaning machines and their attachments;	Non-routine manual physical
9129	Other Cleaning Workers	(b) selecting and applying cleaning agents to remove stains from carpets;	Non-routine manual physical
9129	Other Cleaning Workers	(c) treating carpets with soil-repellent chemicals and deodorants, and treating for pests;	Non-routine manual physical
9129	Other Cleaning Workers	(d) cleaning stone walls, metal surfaces and fascias using high-pressure water cleaners and solvents;	Non-routine manual physical
9129	Other Cleaning Workers	(e) applying chemicals and high-pressure cleaning methods to remove micro-organisms from water and filtration systems;	Non-routine manual physical
9129	Other Cleaning Workers	(f) using wet vacuums and other suction equipment to remove scale, accumulated dirt and other deposits from swimming pools, cooling tower components and drains.	Non-routine manual physical
9211	Crop Farm Labourers	digging and shovelling to clear ditches or for other purposes;	Non-routine manual physical
9211	Crop Farm Labourers	loading and unloading supplies, produce and other materials;	Routine manual
9211	Crop Farm Labourers	raking, pitching and stacking straw, hay and similar materials;	Routine manual

9211	Crop Farm Labourers	watering, thinning and weeding crops by hand or using hand tools;	Non-routine manual physical
9211	Crop Farm Labourers	picking fruit, nuts, vegetables and other crops;	Non-routine manual physical
9211	Crop Farm Labourers	planting and harvesting field crops such as rice, by hand;	Non-routine manual physical
9211	Crop Farm Labourers	grading, sorting, bunching and packing produce into containers;	Routine manual
9211	Crop Farm Labourers	performing minor repairs on fixtures, buildings, equipment and fences.	Non-routine manual physical
9212	Livestock Farm Labourers	(a) digging and shovelling to clear ditches or for other purposes;	Non-routine manual physical
9212	Livestock Farm Labourers	(b) loading and unloading supplies, produce and other materials;	Routine manual
9212	Livestock Farm Labourers	(c) feeding, watering and cleaning animals and keeping their quarters clean;	Non-routine manual physical
9212	Livestock Farm Labourers	(d) monitoring livestock and reporting on their condition;	Routine cognitive
9212	Livestock Farm Labourers	(e) assisting with maintaining the health and welfare of livestock;	Non-routine manual physical
9212	Livestock Farm Labourers	(f) assisting with herding, droving and separating livestock for milking, shearing, transportation or slaughter, and between pastures;	Non-routine manual physical
9212	Livestock Farm Labourers	(g) collecting eggs and placing in incubators;	Non-routine manual physical
9212	Livestock Farm Labourers	(h) raking, pitching, stacking and storing hay, straw and other types of animal feed and bedding;	Routine manual
9212	Livestock Farm Labourers	(i) grading, sorting and packing produce into containers;	Routine manual
9212	Livestock Farm Labourers	(j) performing minor repairs on fixtures, buildings, equipment and fences.	Non-routine manual physical

9213	Mixed Crop and Livestock Farm Labourers	(a) digging and shovelling to clear ditches or for other purposes;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(b) loading and unloading supplies, produce and other materials;	Routine manual
9213	Mixed Crop and Livestock Farm Labourers	(c) raking, pitching and stacking straw, hay and similar materials;	Routine manual
9213	Mixed Crop and Livestock Farm Labourers	(d) watering, thinning and weeding crops by hand or using hand tools;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(e) picking fruit, nuts, vegetables and other crops and collecting eggs;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(f) planting and harvesting field crops such as rice, by hand;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(g) feeding, watering and cleaning animals and keeping their quarters clean;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(h) monitoring livestock and reporting on their condition;	Routine cognitive
9213	Mixed Crop and Livestock Farm Labourers	(i) assisting with herding, droving and separating livestock for milking, shearing, transportation or slaughter, and between pastures;	Non-routine manual physical
9213	Mixed Crop and Livestock Farm Labourers	(j) grading, sorting, bunching and packing produce into containers;	Routine manual
9213	Mixed Crop and Livestock Farm Labourers	(k) performing minor repairs on fixtures, buildings, equipment and fences.	Non-routine manual physical
9214	Garden and Horticultural Labourers	(a) loading, unloading and moving supplies, produce and equipment;	Routine manual
9214	Garden and Horticultural Labourers	(b) preparing garden sites and plots using hand tools and simple machines;	Non-routine manual physical

9214	Garden and Horticultural Labourers	(c) assisting with planting and transplanting flowers, shrubs, trees and lawns;	Non-routine manual physical
9214	Garden and Horticultural Labourers	(d) maintaining gardens by watering, weeding and mowing lawns;	Non-routine manual physical
9214	Garden and Horticultural Labourers	(e) cleaning gardens and removing rubbish;	Non-routine manual physical
9214	Garden and Horticultural Labourers	(f) assisting with propagating, planting and potting seeds, bulbs and cuttings;	Non-routine manual physical
9214	Garden and Horticultural Labourers	(g) tending plants by hand watering and weeding;	Non-routine manual physical
9214	Garden and Horticultural Labourers	(h) harvesting and packaging plants for sale and transport;	Routine manual
9214	Garden and Horticultural Labourers	(i) performing minor repairs on fixtures, buildings, equipment and fences.	Non-routine manual physical
9215	Forestry Labourers	(a) digging holes for tree planting;	Non-routine manual physical
9215	Forestry Labourers	(b) stacking and loading logs and timber;	Routine manual
9215	Forestry Labourers	(c) clearing undergrowth in forest stands and thinning young plantations;	Non-routine manual physical
9215	Forestry Labourers	(d) maintaining look-out for fires in forests;	Non-routine manual physical
9215	Forestry Labourers	(e) removing major branches and tree tops, trimming branches and sawing trunks into logs;	Non-routine manual physical
9215	Forestry Labourers	(f) operating and maintaining manual and hand-held machine saws to fell trees and cut felled trees and branches into logs;	Non-routine manual physical
9215	Forestry Labourers	(g) collecting seeds and planting seedlings;	Non-routine manual physical
9215	Forestry Labourers	(h) performing minor repairs and maintenance of forest roads, buildings, facilities and equipment.	Non-routine manual physical



9216	Fishery and Aquaculture Labourers	cleaning the sea-bed and feeding fish and molluscs that are being cultivated;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	gathering seaweed, sea mosses, clams and other molluscs;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	preparing nets, lines and other fishing tackle and other deck equipment;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	operating fishing gear to catch fish and other marine life;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	cleaning, sorting and packing fish and seafood in ice and salt, and stowing catch in hold;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	cleaning deck surfaces and fish hold;	Non-routine manual physical
9216	Fishery and Aquaculture Labourers	handling mooring lines during docking.	Non-routine manual physical
9311	Mining and Quarrying Labourers	(a) assisting miners and quarriers in maintaining machinery, equipment, and mine and quarry installations;	Non-routine manual physical
9311	Mining and Quarrying Labourers	(b) assembling and dismantling mining equipment;	Non-routine manual physical
9311	Mining and Quarrying Labourers	(c) removing tunnel supports from disused workings in mines and quarries;	Non-routine manual physical
9311	Mining and Quarrying Labourers	(d) removing dangerous projections from mine and quarry workings;	Non-routine manual physical
9311	Mining and Quarrying Labourers	(e) removing waste and serviceable materials and equipment from work areas after extraction activities have been completed, and clearing rock and mineral spills;	Non-routine manual physical
9311	Mining and Quarrying Labourers	(f) cleaning machinery, equipment, tools, roadways and haulage tracks;	Non-routine manual physical

9311	Mining and Quarrying Labourers	(g) sorting, loading, unloading, stacking and storing tools, materials and supplies used by other mine workers.	Routine manual
9312	Civil Engineering Labourers	(a) digging and filling holes and trenches using hand-held tools;	Non-routine manual physical
9312	Civil Engineering Labourers	(b) shovelling and spreading gravel and related materials;	Non-routine manual physical
9312	Civil Engineering Labourers	(c) trimming and cutting rocks and concrete and bitumen surfaces using jack-hammers;	Non-routine manual physical
9312	Civil Engineering Labourers	(d) loading and unloading construction materials, excavated material and equipment and transporting them around construction sites using wheelbarrows and hand trucks;	Routine manual
9312	Civil Engineering Labourers	(e) cleaning work sites and removing obstructions.	Non-routine manual physical
9313	Building Construction Labourers	(a) cleaning used building bricks and doing other simple work on demolition sites;	Non-routine manual physical
9313	Building Construction Labourers	(b) mixing, pouring and spreading materials such as concrete, plaster and mortar;	Non-routine manual physical
9313	Building Construction Labourers	(c) digging and filling holes and trenches using hand-held tools;	Non-routine manual physical
9313	Building Construction Labourers	(d) spreading sand, soil, gravel and similar materials;	Non-routine manual physical
9313	Building Construction Labourers	(e) loading and unloading construction materials, excavated material and equipment and transporting them around construction sites using wheelbarrows, hods and hand trucks;	Routine manual

9313	Building Construction Labourers	(f) cleaning work sites and removing obstructions.	Non-routine manual physical
9321	Hand Packers	weighing, wrapping, sealing and packing materials and various products by hand;	Routine manual
9321	Hand Packers	filling bottles, cans, boxes, bags and other containers with products by hand;	Routine manual
9321	Hand Packers	labelling products, packages and various containers by hand.	Routine manual
9329	Manufacturing Labourers Not Elsewhere Classified	(a) conveying goods, material, equipment and other items to work areas, and removing finished pieces;	Non-routine manual physical
9329	Manufacturing Labourers Not Elsewhere Classified	(b) loading and unloading vehicles, trucks and trolleys;	Routine manual
9329	Manufacturing Labourers Not Elsewhere Classified	(c) clearing machine blockages, and cleaning machinery, equipment and tools;	Non-routine manual physical
9329	Manufacturing Labourers Not Elsewhere Classified	(d) carrying out manual sorting of products or components.	Routine manual
9331	Hand and Pedal Vehicle Drivers	(a) loading and unloading goods, or assisting passengers in getting on or off a vehicle;	Routine manual
9331	Hand and Pedal Vehicle Drivers	(b) moving vehicle in the desired direction with due regard to other traffic and traffic regulations;	Non-routine manual physical
9331	Hand and Pedal Vehicle Drivers	(c) inspecting vehicle components to identify wear and damage;	Routine cognitive
9331	Hand and Pedal Vehicle Drivers	(d) maintaining vehicle, making minor repairs and installing replacement parts;	Non-routine manual physical
9331	Hand and Pedal Vehicle Drivers	(e) collecting fares or charges.	Routine cognitive

9332	Drivers of Animal-drawn Vehicles and Machinery	(a) harnessing animals and hitching them to vehicles or machinery;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(b) loading or unloading goods, or assisting passengers in getting on or off a vehicle;	Routine manual
9332	Drivers of Animal-drawn Vehicles and Machinery	(c) driving animals in the desired direction with due regard to other traffic and traffic regulations;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(d) collecting fares or charges;	Routine cognitive
9332	Drivers of Animal-drawn Vehicles and Machinery	(e) driving animals to haul wagons in mines or quarries;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(f) driving animals hitched to farm or other machinery;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(g) driving working elephants;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(h) maintaining vehicle or machinery, making minor repairs and installing replacement parts;	Non-routine manual physical
9332	Drivers of Animal-drawn Vehicles and Machinery	(i) grooming and feeding animals.	Non-routine manual physical
9333	Freight Handlers	packing office or household furniture, machines, appliances and related goods to be transported from one place to another;	Routine manual
9333	Freight Handlers	carrying goods to be loaded on or unloaded from vans, trucks, wagons, ships or aircraft;	Non-routine manual physical

9333	Freight Handlers	loading and unloading grain, coal, sand, baggage and other items by placing them on conveyor belts, pipes and other conveyances;	Routine manual
9333	Freight Handlers	connecting hoses between mainshore installation pipes and tanks of barges, tankers and other ships to load and unload petroleum, liquefied gases and other liquids;	Non-routine manual physical
9333	Freight Handlers	carrying and stacking goods in warehouses and similar establishments;	Routine manual
9333	Freight Handlers	sorting cargo prior to loading and unloading.	Routine cognitive
9334	Shelf Fillers	(a) placing goods neatly in bins and on racks, and stacking bulky goods on floors;	Routine manual
9334	Shelf Fillers	(b) filling shelves with goods and ensuring that goods with the earliest use-by dates are at the front of shelves;	Routine cognitive
9334	Shelf Fillers	(c) removing goods with past due use-by dates;	Non-routine manual physical
9334	Shelf Fillers	(d) maintaining shelf order by removing stock belonging in a different location;	Routine cognitive
9334	Shelf Fillers	(e) noting what has been sold and collecting goods needed from the stockroom;	Routine cognitive
9334	Shelf Fillers	(f) obtaining articles for customers from shelf or stockroom;	Routine cognitive
9334	Shelf Fillers	(g) directing customers to location of articles sought;	Routine cognitive
9334	Shelf Fillers	(h) receiving, opening, unpacking and inspecting for damage merchandise from manufacturer or distributor.	Routine cognitive
9412	Kitchen Helpers	cleaning kitchens, food preparation areas and service areas;	Non-routine manual physical

9412	Kitchen Helpers	assisting cooks and chefs in preparation of food by washing, peeling, chopping, cutting, measuring and mixing ingredients;	Non-routine manual physical
9412	Kitchen Helpers	assembling dishes for service;	Non-routine manual physical
9412	Kitchen Helpers	unpacking checking, transferring, weighing and storing supplies in refrigerators, cupboards and other storage areas;	Routine manual
9412	Kitchen Helpers	washing dishes and cooking utensils and putting them away;	Non-routine manual physical
9412	Kitchen Helpers	preparing, cooking, toasting and heating simple food items.	Non-routine manual physical
9510	Street and Related Services Workers	(a) obtaining the materials necessary to perform services;	Non-routine manual physical
9510	Street and Related Services Workers	(b) approaching people on the street to offer services;	Non-routine interpersonal
9510	Street and Related Services Workers	(c) cleaning and polishing shoes;	Non-routine manual physical
9510	Street and Related Services Workers	(d) cleaning and polishing car windows;	Non-routine manual physical
9510	Street and Related Services Workers	(e) running errands;	Non-routine manual physical
9510	Street and Related Services Workers	(f) assisting car drivers to find a parking place and ensuring that the car is not damaged during the driver's absence;	Non-routine manual physical
9510	Street and Related Services Workers	(g) handing out leaflets and free newspapers;	Non-routine manual physical

9510	Street and Related Services Workers	(h) receiving immediate payment.	Routine cognitive
9520	Street Vendors (excluding Food)	(a) buying or receiving items for sale, or making simple items;	Routine cognitive
9520	Street Vendors (excluding Food)	(b) loading and unloading baskets, trays, pushcarts, bicycles, hand-trucks or other vehicles, to transport goods to the streets or public places such as stations or cinemas;	Routine cognitive
9520	Street Vendors (excluding Food)	(c) displaying goods or calling out to attract customers' attention;	Non-routine manual physical
9520	Street Vendors (excluding Food)	(d) approaching potential customers on streets, or by going from house to house, to offer goods for sale;	Non-routine interpersonal
9520	Street Vendors (excluding Food)	(e) receiving immediate payment.	Routine cognitive
9611	Garbage and Recycling Collectors	collecting rubbish and recyclable materials and locating them into bins and garbage and recycling trucks;	Non-routine manual physical
9611	Garbage and Recycling Collectors	riding on or in garbage and recycling trucks;	Non-routine manual physical
9611	Garbage and Recycling Collectors	lifting garbage bins and emptying contents into trucks and larger containers;	Non-routine manual physical
9611	Garbage and Recycling Collectors	unloading garbage and recycling trucks.	Routine manual
9612	Refuse Sorters	(a) searching through refuse and collecting items for recycling from dump sites, domestic, commercial and industrial premises or from public places such as streets;	Non-routine manual physical
9612	Refuse Sorters	(b) sorting cardboard, paper, glass, plastic, aluminium or	Routine cognitive

		other recyclable materials by type;	
9612	Refuse Sorters	(c) placing recyclable items and materials in designated compartments and containers for storage or transportation;	Routine cognitive
9612	Refuse Sorters	(d) identifying and setting aside items of furniture, equipment, machinery, or components that are suitable for repair or re-use;	Routine cognitive
9612	Refuse Sorters	(e) transporting recyclable items by hand or using non-motorized vehicles;	Non-routine manual physical
9612	Refuse Sorters	(f) selling recyclable or reusable materials.	Routine cognitive
9613	Sweepers and Related Labourers	(a) sweeping streets, parks, airports, stations and similar public places;	Routine manual
9613	Sweepers and Related Labourers	(b) shovelling snow;	Non-routine manual physical
9613	Sweepers and Related Labourers	(c) beating dust out of carpets by using a carpet-beater;	Non-routine manual physical
9613	Sweepers and Related Labourers	(d) cleaning rubbish, leaves and snow from driveways and grounds.	Non-routine manual physical
9621	Messengers, Package Deliverers and Luggage Porters	(a) delivering messages, packages and other items within an establishment or between establishments or elsewhere;	Routine cognitive
9621	Messengers, Package Deliverers and Luggage Porters	(b) delivering various goods to and from enterprises, shops, households and other places;	Routine cognitive
9621	Messengers, Package Deliverers and Luggage Porters	(c) carrying and delivering luggage at hotels, stations, airports, and elsewhere;	Non-routine manual physical



9621	Messengers, Package Deliverers and Luggage Porters	(d) receiving and marking baggage by completing and attaching claim checks;	Routine cognitive
9621	Messengers, Package Deliverers and Luggage Porters	(e) planning and following the most efficient route;	Routine cognitive
9621	Messengers, Package Deliverers and Luggage Porters	(f) sorting items to be delivered according to the delivery route.	Routine cognitive
9622	Odd-job Persons	(a) repairing broken windows, screens, doors, fences, barbecues, picnic tables, shelves, cupboards and other items;	Non-routine manual physical
9622	Odd-job Persons	(b) replacing defective items such as light bulbs;	Non-routine manual physical
9622	Odd-job Persons	(c) repairing and painting interior and exterior surfaces such as walls, ceilings and fences;	Non-routine manual physical
9622	Odd-job Persons	(d) adjusting doors and windows;	Non-routine manual physical
9622	Odd-job Persons	(e) replacing tap washers;	Non-routine manual physical
9622	Odd-job Persons	(f) putting up handrails and grab rails;	Non-routine manual physical
9622	Odd-job Persons	(g) unloading coal or wood and putting it into cellars of private households or establishments.	Non-routine manual physical
9623	Meter Readers and Vending-machine Collectors	(a) filling storage areas of vending machines and collecting money from their containers;	Routine cognitive
9623	Meter Readers and Vending-machine Collectors	(b) collecting money from parking meters and similar coinboxes;	Routine cognitive
9623	Meter Readers and Vending-machine Collectors	(c) reading electricity, gas or water meters and recording consumption;	Routine cognitive

9623	Meter Readers and Vending-machine Collectors	(d) keeping records of merchandise distributed and money collected;	Routine cognitive
9623	Meter Readers and Vending-machine Collectors	(e) proceeding along established routes to take readings of meter dials;	Non-routine manual physical
9623	Meter Readers and Vending-machine Collectors	(f) verifying readings in cases where consumption appears to be abnormal, and recording possible reasons for fluctuations;	Routine cognitive
9623	Meter Readers and Vending-machine Collectors	(g) inspecting meters for unauthorized connections, defects and damage such as broken seals.	Routine cognitive
9624	Water and Firewood Collectors	(a) cutting and collecting wood from forests for sale in market or as fuel or for own consumption;	Non-routine manual physical
9624	Water and Firewood Collectors	(b) visiting forests or fields to pick pieces of dried wood from the ground and arranging them in heaps;	Non-routine manual physical
9624	Water and Firewood Collectors	(c) cutting decayed branches and trunks of trees using axes and hand-saws;	Non-routine manual physical
9624	Water and Firewood Collectors	(d) tying collected wood into small faggots and carrying them or transporting them on a cart to the market for sale or to villages or households for use;	Non-routine manual physical
9624	Water and Firewood Collectors	(e) drawing water from wells, rivers or ponds, etc. for domestic use;	Non-routine manual physical
9624	Water and Firewood Collectors	(f) collecting water in leather bags, buckets or other containers from taps, rivers, ponds or wells, and delivering the water to work sites, the houses of clients or to own household for drinking, cleaning of drains or storage in tanks.	Non-routine manual physical

9629	Elementary Workers Not Elsewhere Classified	(a) selling admission tickets and passes to patrons at entertainment events or collecting tickets, passes and tags from patrons;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(b) examining tickets or passes to verify authenticity, using criteria such as colour and date issued;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(c) guiding patrons to exits or providing other instructions or assistance in case of emergency;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(d) directing patrons to restrooms, concession stands and telephones;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(e) directing vehicle drivers to parking spaces;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(f) patrolling parking areas in order to prevent vehicle damage and vehicle property theft;	Non-routine manual physical
9629	Elementary Workers Not Elsewhere Classified	(g) calculating parking charges and collecting fees from customers;	Routine cognitive
9629	Elementary Workers Not Elsewhere Classified	(h) assigning dressing room facilities, locker space, or clothing containers to patrons of athletic or bathing establishments.	Routine cognitive
1321	Manufacturing Managers	(a) determining, implementing and monitoring production strategies, policies and plans;	Non-routine analytical
1321	Manufacturing Managers	(b) planning details of production activities in terms of output quality and quantity, cost, time available and labour requirements;	Non-routine analytical

1321	Manufacturing Managers	(c) controlling the operation of production plant and quality procedures through planning of maintenance, designation of operating hours and supply of parts and tools;	Non-routine analytical
1321	Manufacturing Managers	(d) establishing and managing budgets, monitoring production output and costs, and adjusting processes and resources to minimize costs;	Non-routine analytical
1321	Manufacturing Managers	(e) consulting with and informing other managers about production matters;	Non-routine interpersonal
1321	Manufacturing Managers	(f) overseeing the acquisition and installation of new plant and equipment;	Non-routine interpersonal
1321	Manufacturing Managers	(g) controlling the preparation of production records and reports;	Non-routine analytical
1321	Manufacturing Managers	(h) coordinating the implementation of occupational health and safety requirements;	Non-routine interpersonal
1321	Manufacturing Managers	(i) identifying business opportunities and determining products to be manufactured;	Non-routine analytical
1321	Manufacturing Managers	(j) researching and implementing regulatory and statutory requirements affecting manufacturing operations and the environment;	Non-routine analytical
1321	Manufacturing Managers	(k) overseeing the provision of quotations for the manufacture of specialized goods and establishing contracts with customers and suppliers;	Non-routine interpersonal
1321	Manufacturing Managers	(l) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1342	Health Services Managers	(a) providing overall direction and management for the service, facility, organization or centre;	Non-routine interpersonal

1342	Health Services Managers	(b) directing, supervising and evaluating the work activities of medical, nursing, technical, clerical, service, maintenance and other personnel;	Non-routine interpersonal
1342	Health Services Managers	(c) establishing objectives and evaluative or operational criteria for units they manage;	Non-routine analytical
1342	Health Services Managers	(d) directing or conducting recruitment, hiring and training of personnel;	Non-routine interpersonal
1342	Health Services Managers	(e) developing, implementing and monitoring procedures, policies and performance standards for medical, nursing, technical and administrative staff;	Non-routine analytical
1342	Health Services Managers	(f) 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;	Routine cognitive
1342	Health Services Managers	(g) controlling administrative operations such as budget planning, report preparation, and expenditure on supplies, equipment and services;	Non-routine interpersonal
1342	Health Services Managers	(h) liaising with other health and welfare service providers, boards and funding bodies to coordinate the provision of services;	Non-routine interpersonal
1342	Health Services Managers	(i) advising government bodies about measures to improve health and welfare services and facilities;	Non-routine analytical
1342	Health Services Managers	(j) representing the organization in negotiations, and at conventions, seminars, public hearings and forums.	Non-routine interpersonal
1343	Aged Care Services Managers	(a) providing overall direction and management for a service, facility, organization or centre;	Non-routine interpersonal

1343	Aged Care Services Managers	(b) directing, supervising and evaluating the work activities of medical, nursing, technical, clerical, service, maintenance and other personnel;	Non-routine interpersonal
1343	Aged Care Services Managers	(c) establishing objectives and evaluative or operational criteria for units they manage;	Non-routine analytical
1343	Aged Care Services Managers	(d) directing or conducting recruitment, hiring and training of personnel;	Non-routine interpersonal
1343	Aged Care Services Managers	(e) developing, implementing and monitoring procedures, policies and performance standards for nursing, personal care, technical and administrative staff;	Non-routine analytical
1343	Aged Care Services Managers	(f) coordinating and administering welfare programmes and care services for the elderly;	Routine cognitive
1343	Aged Care Services Managers	(g) controlling administrative operations such as budget planning, report preparation, and expenditure on supplies, equipment and services;	Non-routine analytical
1343	Aged Care Services Managers	(h) liaising with other health and welfare providers, boards and funding bodies to coordinate the provision of services;	Non-routine interpersonal
1343	Aged Care Services Managers	(i) advising government bodies about measures to improve health and welfare services and facilities;	Non-routine analytical
1343	Aged Care Services Managers	(j) representing the organization in negotiations, and at conventions, seminars, public hearings and forums.	Non-routine interpersonal
1344	Social Welfare Managers	(a) providing overall direction and management for a service, facility, organization or centre;	Non-routine interpersonal
1344	Social Welfare Managers	(b) developing, implementing and monitoring procedures, policies and standards for staff;	Non-routine analytical

1344	Social Welfare Managers	(c) monitoring and evaluating resources devoted to the provision of welfare, housing and other social services;	Non-routine analytical
1344	Social Welfare Managers	(d) controlling administrative operations such as budget planning, report preparation, and expenditure on supplies, equipment and services;	Non-routine analytical
1344	Social Welfare Managers	(e) liaising with other welfare and health services providers, boards and funding bodies to discuss areas of health and welfare service cooperation and coordination;	Non-routine interpersonal
1344	Social Welfare Managers	(f) advising government bodies about measures to improve welfare services and facilities;	Non-routine analytical
1344	Social Welfare Managers	(g) representing the organization in negotiations, and at conventions, seminars, public hearings and forums;	Non-routine interpersonal
1344	Social Welfare Managers	(h) establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;	Non-routine analytical
1344	Social Welfare Managers	(i) establishing and directing operational and administrative procedures;	Non-routine interpersonal
1344	Social Welfare Managers	(j) overseeing the selection, training and performance of staff.	Non-routine interpersonal
1411	Hotel Managers	(a) directing and overseeing reservation, reception, room service and housekeeping activities;	Non-routine interpersonal
1411	Hotel Managers	(b) supervising security arrangements and garden and property maintenance;	Non-routine interpersonal
1411	Hotel Managers	(c) planning and supervising bar, restaurant, function and conference activities;	Non-routine interpersonal
1411	Hotel Managers	(d) observing liquor, gaming and other laws and regulations;	Routine cognitive

1411	Hotel Managers	(e) assessing and reviewing customer satisfaction;	Non-routine analytical
1411	Hotel Managers	(f) overseeing accounting and purchasing activities;	Non-routine interpersonal
1411	Hotel Managers	(g) undertaking budgeting for the establishment;	Non-routine analytical
1411	Hotel Managers	(h) controlling selection, training and supervision of staff;	Non-routine interpersonal
1411	Hotel Managers	(i) ensuring compliance with occupational health and safety regulations;	Routine cognitive
1411	Hotel Managers	(j) providing guests with local tourism information, and arranging tours and transportation.	Routine cognitive
2111	Physicists and Astronomers	(a) conducting research and improving or developing concepts, theories, instrumentation, software and operational methods related to physics and astronomy;	Non-routine analytical
2111	Physicists and Astronomers	(b) 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;	Non-routine analytical
2111	Physicists and Astronomers	(c) evaluating results of investigations and experiments and expressing conclusions, mainly using mathematical techniques and models;	Non-routine analytical
2111	Physicists and Astronomers	(d) 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;	Non-routine analytical



2111	Physicists and Astronomers	(e) ensuring the safe and effective delivery of radiation (ionizing and non-ionizing) to patients to achieve a diagnostic or therapeutic result as prescribed by a medical practitioner;	Routine cognitive
2111	Physicists and Astronomers	(f) ensuring the accurate measurement and characterization of physical quantities used in medical applications;	Routine cognitive
2111	Physicists and Astronomers	(g) testing, commissioning and evaluating equipment used in applications such as imaging, medical treatment and dosimetry;	Routine cognitive
2111	Physicists and Astronomers	(h) advising and consulting with medical practitioners and other health care professionals in optimizing the balance between the beneficial and deleterious effects of radiation;	Non-routine analytical
2111	Physicists and Astronomers	(i) 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;	Non-routine analytical
2111	Physicists and Astronomers	(j) developing, implementing and maintaining standards and protocols for the measurement of physical phenomena and for the use of nuclear technology in industrial and medical applications;	Non-routine analytical
2111	Physicists and Astronomers	(k) preparing scientific papers and reports.	Non-routine analytical

2112	Meteorologists	(a) 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;	Non-routine analytical
2112	Meteorologists	(b) studying data collected from meteorological stations, radar and satellite imagery and computer model output to plot and forecast weather conditions;	Non-routine analytical
2112	Meteorologists	(c) 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;	Non-routine analytical
2112	Meteorologists	(d) conducting experiments in fog dispersal, cloud seeding, rain enhancement and other types of weather modification programmes;	Routine cognitive
2112	Meteorologists	(e) developing and testing mathematical computer models of weather and climate for experimental or operational use;	Non-routine analytical
2112	Meteorologists	(f) participating in studies of the effect of weather on the environment;	Non-routine analytical

2112	Meteorologists	(g) analysing the impact of industrial projects and human activity on the climate and quality of the air, and working with the social science, engineering and economic communities to develop appropriate mitigation strategies;	Non-routine analytical
2112	Meteorologists	(h) engaging in the design and development of new equipment and procedures for meteorological data collection and remote sensing, or for related applications;	Non-routine analytical
2112	Meteorologists	(i) 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.	Non-routine analytical
2113	Chemists	(a) conducting research and improving or developing concepts, instruments, theories and operational methods related to chemistry;	Non-routine analytical
2113	Chemists	(b) conducting experiments, tests and analyses to investigate chemical composition and energy and chemical changes in various natural or synthetic substances, materials and products;	Non-routine analytical
2113	Chemists	(c) developing procedures for environmental control, quality control and various other procedures for manufacturers or users;	Non-routine analytical
2113	Chemists	(d) conducting programmes of sample and data collection and analysis to identify and	Non-routine analytical

		quantify environmental toxicants;	
2113	Chemists	(e) participating in interdisciplinary research and development projects working with chemical engineers, biologists, microbiologists, agronomists, geologists or other professionals;	Non-routine interpersonal
2113	Chemists	(f) using micro-organisms to convert substances into new compounds;	Non-routine analytical
2113	Chemists	(g) determining ways to strengthen or combine materials or develop new materials.	Non-routine analytical
2113	Chemists	(h) reproducing and synthesizing naturally occurring substances and creating new artificial substances;	Non-routine analytical
2113	Chemists	(i) preparing scientific papers and reports.	Non-routine analytical
2114	Geologists and Geophysicists	(a) conducting research and improving or developing concepts, theories and operational methods related to geology and geophysics;	Non-routine analytical
2114	Geologists and Geophysicists	(b) 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 the nature and chronology of geological formations and assess their commercial applications;	Non-routine analytical
2114	Geologists and Geophysicists	(c) interpreting research data and preparing geological reports, maps, charts and diagrams, reports and papers;	Non-routine analytical

2114	Geologists and Geophysicists	(d) applying geological knowledge to problems encountered in civil engineering projects such as the construction of dams, bridges, tunnels, and large buildings, and land reclamation projects;	Non-routine analytical
2114	Geologists and Geophysicists	(e) using various remote sensing programmes to investigate and measure seismic, gravitational, electrical, thermal and magnetic forces affecting the Earth;	Non-routine analytical
2114	Geologists and Geophysicists	(f) 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;	Non-routine analytical
2114	Geologists and Geophysicists	(g) charting the Earth's magnetic field and applying this and other collected data for broadcasting, navigation and other purposes;	Non-routine analytical
2114	Geologists and Geophysicists	(h) studying and measuring physical properties of seas and the atmosphere and their interrelationship, such as the exchange of thermal energy;	Non-routine analytical
2114	Geologists and Geophysicists	(i) locating and determining the nature and extent of oil, gas and mineral deposits using seismological, gravimetric, magnetic, electrical or radiometric methods;	Non-routine analytical
2114	Geologists and Geophysicists	(j) identifying deposits of construction materials and determining their characteristics and suitability for use as concrete aggregates, road fill or for other applications;	Non-routine analytical

2114	Geologists and Geophysicists	(k) researching the movement, distribution and physical properties of ground and surface waters;	Non-routine analytical
2114	Geologists and Geophysicists	(l) advising in areas such as waste management, route and site selection and the restoration of contaminated sites.	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(a) studying, improving and developing mathematical, actuarial and statistical theories and techniques;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(b) 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;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(c) 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;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(d) designing and putting into operation pension schemes and life, health, social and other types of insurance systems;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(e) applying mathematics, statistics, probability and risk theory to assess potential financial impacts of future events;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(f) planning and organizing surveys and other statistical collections, and designing questionnaires;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(g) evaluating, processing, analysing and interpreting statistical data and preparing them for publication;	Non-routine analytical

2120	Mathematicians, Actuaries and Statisticians	(h) 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;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(i) preparing scientific papers and reports;	Non-routine analytical
2120	Mathematicians, Actuaries and Statisticians	(j) supervising the work of mathematical, actuarial and statistical assistants and statistical clerks.	Non-routine interpersonal
2131	Biologists, Botanists, Zoologists and Related Professionals	(a) undertaking research in laboratories and in the field to increase scientific knowledge of living organisms, to discover new information, to test hypotheses, 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;	Non-routine analytical
2131	Biologists, Botanists, Zoologists and Related Professionals	(b) designing and conducting experiments and tests;	Non-routine analytical
2131	Biologists, Botanists, Zoologists and Related Professionals	(c) 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;	Non-routine analytical

2131	Biologists, Botanists, Zoologists and Related Professionals	(d) examining living organisms using a variety of specialized 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;	Non-routine analytical
2131	Biologists, Botanists, Zoologists and Related Professionals	(e) identifying, classifying, recording and monitoring living organisms and maintaining databases;	Routine cognitive
2131	Biologists, Botanists, Zoologists and Related Professionals	(f) 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;	Non-routine analytical
2131	Biologists, Botanists, Zoologists and Related Professionals	(g) designing and carrying out environmental impact assessments to identify changes caused by natural or human factors;	Non-routine analytical
2131	Biologists, Botanists, Zoologists and Related Professionals	(h) providing advice to governments, organizations and businesses in areas such as conservation, management of natural resources, and the effects of climate change and pollution.	Non-routine analytical
2133	Environmental Protection Professionals	(a) 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 such problems;	Non-routine analytical



2133	Environmental Protection Professionals	(b) assessing the likely impact that potential or proposed activities, projects and developments may have on the environment, and recommending whether such developments should proceed;	Non-routine analytical
2133	Environmental Protection Professionals	(c) developing and coordinating the implementation of environmental management systems to enable organizations to identify, monitor and control the impact of their activities, products and services on the environment;	Non-routine interpersonal
2133	Environmental Protection Professionals	(d) conducting audits to evaluate the environmental impact of existing activities, processes, wastes, noises and substances;	Routine cognitive
2133	Environmental Protection Professionals	(e) assessing an organization's compliance with government and internal environmental regulations and guidelines, identifying violations and determining appropriate remedial action;	Non-routine analytical
2133	Environmental Protection Professionals	(f) providing technical advice and support services to organizations on how best to deal with environmental problems in order to reduce environmental damage and minimize financial loss;	Non-routine analytical
2133	Environmental Protection Professionals	(g) developing conservation plans.	Non-routine analytical
2143	Environmental Engineers	(a) conducting research, assessing and reporting on the environmental impact of existing and proposed construction, civil engineering and other activities;	Non-routine analytical

2143	Environmental Engineers	(b) inspecting industrial and municipal facilities and programmes to evaluate operational effectiveness and ensure compliance with environmental regulations;	Routine cognitive
2143	Environmental Engineers	(c) designing and overseeing the development of systems, processes and equipment for control, management, or remediation of water, air or soil quality;	Non-routine interpersonal
2143	Environmental Engineers	(d) providing environmental engineering assistance in network analysis, regulatory analysis, and planning or reviewing database development;	Non-routine analytical
2143	Environmental Engineers	(e) obtaining, updating, and maintaining plans, permits, and standard operating procedures;	Routine cognitive
2143	Environmental Engineers	(f) providing engineering and technical support for environmental remediation and litigation projects, including remediation system design and determination of regulatory applicability;	Non-routine analytical
2143	Environmental Engineers	(g) monitoring progress of environmental improvement programmes;	Non-routine analytical
2143	Environmental Engineers	(h) advising corporations and government agencies of procedures to follow in cleaning up contaminated sites to protect people and the environment;	Non-routine analytical
2143	Environmental Engineers	(i) collaborating with environmental scientists, planners, hazardous waste technicians, engineers from other disciplines, and specialists in law and business to address environmental problems.	Non-routine interpersonal

2145	Chemical Engineers	(a) 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;	Non-routine analytical
2145	Chemical Engineers	(b) specifying chemical production methods, materials and quality standards and ensuring that they conform to specifications;	Routine cognitive
2145	Chemical Engineers	(c) establishing control standards and procedures to ensure safety and efficiency of chemical production operations and safety of workers' operating equipment or of those working in close proximity to ongoing chemical reactions;	Non-routine analytical
2145	Chemical Engineers	(d) designing chemical plant equipment and devising processes for manufacturing chemicals and products;	Non-routine analytical
2145	Chemical Engineers	(e) performing tests throughout stages of production to determine degree of control over variables, including temperature, density, specific gravity, and pressure;	Non-routine analytical
2145	Chemical Engineers	(f) developing safety procedures to be employed;	Non-routine analytical
2145	Chemical Engineers	(g) preparing estimates of production costs and production progress reports for management;	Non-routine analytical
2145	Chemical Engineers	(h) performing laboratory studies of steps in the manufacture of new products and testing proposed processes	Non-routine analytical

		in small-scale operations such as a pilot plant.	
2146	Mining Engineers, Metallurgists and Related Professionals	(a) determining the location and planning the extraction of coal, metallic ores, non-metallic minerals, and building materials such as stone and gravel;	Non-routine analytical
2146	Mining Engineers, Metallurgists and Related Professionals	(b) determining the most suitable methods of efficient mining and extraction and types of machinery to be used, planning layout and directing construction of shafts and tunnels;	Non-routine analytical
2146	Mining Engineers, Metallurgists and Related Professionals	(c) determining drilling sites and devising methods of controlling the flow of water, oil or gas from wells;	Non-routine analytical
2146	Mining Engineers, Metallurgists and Related Professionals	(d) planning and directing storage, initial treatment and transportation of water, oil or gas;	Non-routine interpersonal
2146	Mining Engineers, Metallurgists and Related Professionals	(e) establishing safety standards and procedures and first-aid facilities, especially underground;	Non-routine analytical
2146	Mining Engineers, Metallurgists and Related Professionals	(f) conducting research, developing methods of extracting metals from their ores and advising on their application;	Non-routine analytical
2146	Mining Engineers, Metallurgists and Related Professionals	(g) investigating properties of metals and alloys, developing new alloys and advising on and supervising technical aspects of metal and alloy manufacture and processing;	Non-routine analytical

2146	Mining Engineers, Metallurgists and Related Professionals	(h) maintaining technical liaison and consultancy with other relevant specialists such as geologists and geophysicists;	Non-routine interpersonal
2146	Mining Engineers, Metallurgists and Related Professionals	(i) examining deposits or mines to evaluate profitability.	Non-routine analytical
2152	Electronics Engineers	(a) advising on and designing electronic devices or components, circuits, semi- conductors, and systems;	Non-routine analytical
2152	Electronics Engineers	(b) specifying production or installation methods, materials and quality standards, and directing production or installation work of electronic products and systems;	Non-routine analytical
2152	Electronics Engineers	(c) establishing control standards and procedures to ensure efficient functioning and safety of electronic systems, motors and equipment;	Non-routine analytical
2152	Electronics Engineers	(d) organizing and directing maintenance and repair of existing electronic systems and equipment;	Non-routine manual physical
2152	Electronics Engineers	(e) designing electronic circuits and components for use in fields such as aerospace guidance and propulsion control, acoustics, or instruments and controls;	Non-routine analytical
2152	Electronics Engineers	(f) researching and advising on radar, telemetry and remote control systems, microwaves and other electronic equipment;	Non-routine analytical

2152	Electronics Engineers	(g) designing and developing signal processing algorithms and implementing these through appropriate choice of hardware and software;	Non-routine analytical
2152	Electronics Engineers	(h) developing apparatus and procedures to test electronic components, circuits and systems.	Non-routine analytical
2153	Telecommunications Engineers	(a) advising on and designing telecommunications devices or components, systems, equipment and distribution centres;	Non-routine analytical
2153	Telecommunications Engineers	(b) specifying production or installation methods, materials, quality and safety standards and directing production or installation work of telecommunications products and systems;	Non-routine analytical
2153	Telecommunications Engineers	(c) organizing and directing maintenance and repair of existing telecommunication systems, motors and equipment;	Non-routine manual physical
2153	Telecommunications Engineers	(d) researching and advising on telecommunications equipment;	Non-routine analytical
2153	Telecommunications Engineers	(e) planning and designing communications networks based on wired, fibre optical and wireless communication media;	Non-routine analytical
2153	Telecommunications Engineers	(f) designing and developing signal processing algorithms and implementing these through appropriate choice of hardware and software;	Non-routine analytical
2153	Telecommunications Engineers	(g) designing telecommunications networks and radio and television distribution systems, including both cable and over the air.	Non-routine analytical

2164	Town and Traffic Planners	(a) planning layout and coordinating development of urban areas;	Non-routine analytical
2164	Town and Traffic Planners	(b) compiling and analysing data on economic, legal, political, cultural, demographic, sociological, physical and environmental factors affecting land use;	Non-routine analytical
2164	Town and Traffic Planners	(c) conferring with government authorities, communities and specialists in fields such as architecture, planning, social science, the environment and the law;	Non-routine interpersonal
2164	Town and Traffic Planners	(d) devising and recommending use and development of land, and presenting narrative and graphic plans, programmes and designs to groups and individuals;	Non-routine analytical
2164	Town and Traffic Planners	(e) advising governments, companies and communities on urban and regional planning issues and proposals;	Non-routine analytical
2164	Town and Traffic Planners	(f) reviewing and evaluating environmental impact reports;	Non-routine analytical
2164	Town and Traffic Planners	(g) planning and coordinating the development of land areas for parks, schools, institutions, airports, roadways and related projects, and for commercial, industrial and residential sites;	Non-routine analytical
2164	Town and Traffic Planners	(h) planning and advising on routing and control of road traffic and public transportation systems for efficiency and safety.	Non-routine analytical
2211	Generalist Medical Practitioners	(a) conducting physical examinations of patients and interviewing them and their families to determine their health status;	Non-routine interpersonal

2211	Generalist Medical Practitioners	(b) ordering laboratory tests, X-rays and other diagnostic procedures and analysing findings to determine the nature of disorders or illnesses;	Non-routine analytical
2211	Generalist Medical Practitioners	(c) providing continuing medical care for patients including prescribing, administering, counselling on and monitoring curative treatments and preventive measures;	Non-routine analytical
2211	Generalist Medical Practitioners	(d) performing surgery and other clinical procedures;	Routine cognitive
2211	Generalist Medical Practitioners	(e) advising individuals, families and communities on health, nutrition and lifestyle which aid prevention or treatment of disease and disorders;	Non-routine analytical
2211	Generalist Medical Practitioners	(f) providing referrals to patients and families for specialized care in hospitals, rehabilitation centres or other types of health care centres;	Routine cognitive
2211	Generalist Medical Practitioners	(g) identifying, managing and providing referrals for complications before, during and after childbirth;	Non-routine analytical
2211	Generalist Medical Practitioners	(h) recording patients' medical information and history and exchanging information with specialist practitioners and other health workers as required for continuing medical care;	Routine cognitive
2211	Generalist Medical Practitioners	(i) reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements;	Routine cognitive



2211	Generalist Medical Practitioners	(j) conducting research in human health and medical services and disseminating the findings such as through scientific reports;	Non-routine analytical
2211	Generalist Medical Practitioners	(k) planning and participating in programmes designed to prevent the occurrence and spread of common diseases.	Non-routine analytical
2212	Specialist Medical Practitioners	(a) conducting physical examinations of patients and interviewing them and their families to determine their health status;	Non-routine interpersonal
2212	Specialist Medical Practitioners	(b) considering medical information provided by a referring doctor or other health care provider,	Non-routine analytical
2212	Specialist Medical Practitioners	(c) ordering specialized diagnostic tests to determine the nature of disorders or illnesses;	Non-routine analytical
2212	Specialist Medical Practitioners	(d) prescribing, administering and monitoring patients' responses to treatments, medications, anaesthetics, psychotherapies, physical rehabilitation programmes and other preventive and curative measures;	Routine cognitive
2212	Specialist Medical Practitioners	(e) performing surgery of a general or specialized nature;	Routine cognitive
2212	Specialist Medical Practitioners	(f) managing complications before, during and after childbirth;	Routine cognitive
2212	Specialist Medical Practitioners	(g) recording patients' medical information and exchanging information with other health professionals to ensure the provision of comprehensive care;	Routine cognitive

2212	Specialist Medical Practitioners	(h) reporting births, deaths and notifiable diseases to government authorities to meet legal and professional requirements;	Routine cognitive
2212	Specialist Medical Practitioners	(i) providing information to patients and families and communities about preventive measures, treatment and care for specific ailments;	Routine cognitive
2212	Specialist Medical Practitioners	(j) performing autopsies to determine cause of death;	Routine cognitive
2212	Specialist Medical Practitioners	(k) conducting research into specific human disorders and illnesses and preventive or curative methods and disseminating the findings such as through scientific reports;	Non-routine analytical
2212	Specialist Medical Practitioners	(l) planning and participating in programmes designed to prevent the occurrence and spread of specific diseases.	Non-routine analytical
2240	Paramedical Practitioners	(a) conducting physical examinations of patients and interviewing them and their families to determine their health status, and recording patients' medical information;	Non-routine interpersonal
2240	Paramedical Practitioners	(b) performing basic or more routine medical and surgical procedures, including prescribing and administering treatments, medications and other preventive or curative measures, especially for common diseases and disorders;	Routine cognitive
2240	Paramedical Practitioners	(c) administering or ordering diagnostic tests, such as X-ray, electrocardiogram and laboratory tests;	Routine cognitive

2240	Paramedical Practitioners	(d) performing therapeutic procedures such as injections, immunizations, suturing and wound care, and infection management;	Routine cognitive
2240	Paramedical Practitioners	(e) assisting medical doctors with complex surgical procedures;	Routine cognitive
2240	Paramedical Practitioners	(f) monitoring patients' progress and response to treatment, and identifying signs and symptoms requiring referral to medical doctors;	Routine cognitive
2240	Paramedical Practitioners	(g) advising patients and families on diet, exercise and other habits which aid prevention or treatment of disease and disorders;	Non-routine analytical
2240	Paramedical Practitioners	(h) identifying and referring complex or unusual cases to medical doctors, hospitals or other places for specialized care;	Non-routine analytical
2240	Paramedical Practitioners	(i) reporting births, deaths and notifiable diseases to government authorities to meet legal and professional reporting requirements.	Routine cognitive
2250	Veterinarians	(a) determining the presence and nature of abnormal conditions by physical examination, laboratory testing and through diagnostic imaging techniques including radiography and ultrasound;	Non-routine analytical
2250	Veterinarians	(b) treating animals medically and surgically, and administering and prescribing drugs, analgesics, and general and local anaesthetics;	Routine cognitive
2250	Veterinarians	(c) performing surgery, dressing wounds and setting broken bones;	Routine cognitive
2250	Veterinarians	(d) rendering obstetric and dental services to animals;	Routine cognitive

2250	Veterinarians	(e) participating in programmes designed to prevent the occurrence and spread of animal diseases;	Non-routine analytical
2250	Veterinarians	(f) inoculating animals against, and testing for, infectious diseases and notifying authorities of outbreaks of infectious animal diseases;	Routine cognitive
2250	Veterinarians	(g) performing autopsies to determine cause of death;	Routine cognitive
2250	Veterinarians	(h) advising clients on health, nutrition and feeding, hygiene, breeding and care of animals;	Non-routine analytical
2250	Veterinarians	(i) providing euthanasia services for animals.	Routine cognitive
2261	Dentists	(a) 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;	Non-routine analytical
2261	Dentists	(b) providing preventative oral health care such as periodontal treatments, fluoride applications and oral health promotion;	Routine cognitive
2261	Dentists	(c) administering anaesthetics to limit the amount of pain experienced by patients during procedures;	Routine cognitive
2261	Dentists	(d) prescribing medication for relief of ongoing pain after procedures	Routine cognitive
2261	Dentists	(e) providing restorative oral care such as implants, complex crown and bridge restorations and orthodontics, and repairing damaged and decayed teeth;	Non-routine manual physical

2261	Dentists	(f) providing surgical treatments such as extraction of teeth and biopsy of tissue, and performing orthodontic treatment;	Routine cognitive
2261	Dentists	(g) measuring and taking impressions of patients' jaws and teeth in order to determine the shape and size of dental prostheses;	Routine cognitive
2261	Dentists	(h) designing, making, and fitting prosthodontic appliances such as space maintainers, bridges and dentures, or writing fabrication instructions or prescriptions for dental prosthetic technicians;	Routine cognitive
2261	Dentists	(i) restoring oral function with removable and fixed oral prostheses;	Routine cognitive
2261	Dentists	(j) assisting in diagnosing general diseases having oral manifestations such as diabetes;	Routine cognitive
2261	Dentists	(k) educating patients and families on dental hygiene, nutrition and other measures to take care of oral health;	Non-routine interpersonal
2261	Dentists	(l) supervising dental hygienists, dental assistants and other staff.	Non-routine interpersonal
2263	Environmental and Occupational Health and Hygiene Professionals	(a) developing, implementing and reviewing programmes and policies to minimize potential environmental and occupational risks to health and safety;	Non-routine analytical
2263	Environmental and Occupational Health and Hygiene Professionals	(b) preparing and implementing plans and strategies for the safe, economic and suitable disposal of commercial, industrial, medical and household wastes;	Non-routine analytical

2263	Environmental and Occupational Health and Hygiene Professionals	(c) implementing prevention programmes and strategies for communicable diseases, food safety, wastewater treatment and disposal systems, recreation and domestic water quality, contaminated and hazardous substances;	Routine cognitive
2263	Environmental and Occupational Health and Hygiene Professionals	(d) identifying, reporting and documenting hazards, and assessing and controlling risks in the environment and workplace and advising on compliance with relevant law and regulations;	Non-routine analytical
2263	Environmental and Occupational Health and Hygiene Professionals	(e) developing, implementing and monitoring programmes to minimize workplace and environmental pollution involving chemical, physical and biological hazards;	Non-routine analytical
2263	Environmental and Occupational Health and Hygiene Professionals	(f) advising on methods to prevent, eliminate, control, or reduce the exposure of workers, students, the public and the environment to radiological and other hazards;	Non-routine analytical
2263	Environmental and Occupational Health and Hygiene Professionals	(g) promoting ergonomic principles within the workplace such as matching furniture, equipment and work activities to the needs of employees;	Non-routine analytical
2263	Environmental and Occupational Health and Hygiene Professionals	(h) providing education, information, training, and advice to persons at all levels on aspects of occupational hygiene and environmental health;	Non-routine interpersonal
2263	Environmental and Occupational Health and Hygiene Professionals	(i) recording and investigating injuries and equipment damage, and reporting safety performance;	Non-routine analytical

2263	Environmental and Occupational Health and Hygiene Professionals	(j) coordinating arrangements for the compensation, rehabilitation and return to work of injured workers.	Non-routine interpersonal
2265	Dieticians and Nutritionists	(a) instructing individuals, families and communities on nutrition, the planning of diets and preparation of food to maximize health benefits and reduce potential risks to health;	Non-routine interpersonal
2265	Dieticians and Nutritionists	(b) 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;	Non-routine interpersonal
2265	Dieticians and Nutritionists	(c) compiling and assessing data relating to health and nutritional status of individuals, groups and communities based on nutritional values of food served or consumed;	Non-routine analytical
2265	Dieticians and Nutritionists	(d) planning and conducting nutrition assessments, intervention programmes, and education and training to improve nutritional levels among individuals and communities;	Non-routine analytical
2265	Dieticians and Nutritionists	(e) consulting with other health professionals and care providers to manage the dietary and nutritional needs of patients;	Non-routine interpersonal
2265	Dieticians and Nutritionists	(f) developing and evaluating food and nutrition products to meet nutritional requirements;	Routine cognitive
2265	Dieticians and Nutritionists	(g) conducting research on nutrition and disseminating the findings at scientific	Non-routine analytical

		conferences and in other settings.	
2266	Audiologists and Speech Therapists	(a) evaluating hearing, speech and language performance in patients to determine the nature of hearing and communication disorders;	Non-routine analytical
2266	Audiologists and Speech Therapists	(b) administering hearing or speech/language tests or other examinations using specialized diagnostic instruments and equipment, and interpreting test results alongside other medical, social and behavioural diagnostic data to determine appropriate courses of treatment;	Routine cognitive
2266	Audiologists and Speech Therapists	(c) planning, directing and participating in counselling, screening, speech rehabilitation and other programmes related to hearing and communication;	Non-routine interpersonal
2266	Audiologists and Speech Therapists	(d) prescribing hearing aids and other assistive devices according to patients' needs and instructing them in their use;	Routine cognitive
2266	Audiologists and Speech Therapists	(e) planning and conducting treatment programmes to manage physical disorders affecting speech and swallowing;	Non-routine analytical
2266	Audiologists and Speech Therapists	(f) counselling and guiding hearing and/or language-impaired individuals, their families, teachers and employers;	Non-routine interpersonal
2266	Audiologists and Speech Therapists	(g) referring patients and families to additional medical or educational services if needed.	Routine cognitive



2267	Optometrists and Ophthalmic Opticians	(a) examining patients' eyes and conducting diagnostic tests to assess ocular health and determine the nature and extent of vision problems and abnormalities;	Routine cognitive
2267	Optometrists and Ophthalmic Opticians	(b) testing visual function using specialized instruments and equipment for measuring visual acuity and refractive error, function of visual pathways, visual fields, eye movements, freedom of vision and intraocular pressure;	Routine cognitive
2267	Optometrists and Ophthalmic Opticians	(c) detecting, diagnosing and managing eye disease, including prescribing medications for treatment;	Non-routine analytical
2267	Optometrists and Ophthalmic Opticians	(d) consulting with and referring patients to ophthalmologists or other health professionals if additional medical treatment is necessary;	Non-routine interpersonal
2267	Optometrists and Ophthalmic Opticians	(e) detecting and diagnosing eye movement disorders and defects of binocular function, and planning and managing treatment programmes, including counselling patients in eye exercises to coordinate movement and focusing of eyes;	Non-routine analytical
2267	Optometrists and Ophthalmic Opticians	(f) prescribing corrective eyeglasses, contact lenses and other vision aids, and checking optical devices for performance, safety, comfort and lifestyle;	Routine cognitive
2267	Optometrists and Ophthalmic Opticians	(g) advising on visual health matters such as contact lens care, vision care for the elderly, optics, visual ergonomics, and occupational and industrial eye safety.	Non-routine analytical

2269	Health Professionals Not Elsewhere Classified	(a) interviewing patients and conducting diagnostic tests to determine their health status, functional limitations, and the nature of physical or mental disorders, illnesses or other health problems;	Non-routine interpersonal
2269	Health Professionals Not Elsewhere Classified	(b) developing and implementing treatment plans for injuries, illnesses and other physical and mental impairments;	Non-routine analytical
2269	Health Professionals Not Elsewhere Classified	(c) evaluating and documenting patients' progress through treatment plans, and referring patients and families to medical doctors or other health care providers for specialized, rehabilitative or other care services as needed;	Non-routine analytical
2269	Health Professionals Not Elsewhere Classified	(d) administering therapeutic care and treatment to patients, including through application of manual and physical chiropractic and osteopathic techniques;	Routine cognitive
2269	Health Professionals Not Elsewhere Classified	(e) recommending environmental adaptations in the home, leisure, work and school environments on an individual or group basis to enable individuals with functional limitations to perform their daily activities and occupations;	Non-routine analytical
2269	Health Professionals Not Elsewhere Classified	(f) planning and implementing therapeutic programmes on an individual and group basis for improving and maintaining physical, cognitive, emotional and social functioning, including through the use of arts and crafts, dance and movement,	Non-routine analytical

		music and other recreational activities;	
2269	Health Professionals Not Elsewhere Classified	(g) identifying and prescribing treatments for conditions affecting the foot, ankle and related structures of the leg due to illness, disease or other physical impairment, and prescribing corrective footwear and advising on foot care to manage foot ailments;	Non-routine analytical
2269	Health Professionals Not Elsewhere Classified	(h) performing minor surgical procedures such as on the foot and ankles.	Routine cognitive
2412	Financial and Investment Advisers	(a) building and maintaining a client base;	Routine cognitive
2412	Financial and Investment Advisers	(b) interviewing clients to determine financial status and objectives, risk tolerance and other information needed to develop financial plans and investment strategies;	Non-routine interpersonal
2412	Financial and Investment Advisers	(c) setting financial objectives, and developing and implementing strategies for achieving them;	Non-routine analytical
2412	Financial and Investment Advisers	(d) arranging to buy and sell stocks and bonds for clients;	Routine cognitive
2412	Financial and Investment Advisers	(e) monitoring investment performance, and reviewing and revising investment plans based on modified needs and changes in markets;	Non-routine analytical
2412	Financial and Investment Advisers	(f) recommending and arranging insurance cover for clients.	Non-routine analytical

2421	Management and Organization Analysts	(a) assisting and encouraging the development of objectives, strategies and plans aimed at achieving customer satisfaction and the efficient use of organizations' resources;	Non-routine interpersonal
2421	Management and Organization Analysts	(b) analysing and evaluating current systems and structures;	Non-routine analytical
2421	Management and Organization Analysts	(c) discussing current systems with staff and observing systems at all levels of organization;	Non-routine interpersonal
2421	Management and Organization Analysts	(d) directing clients towards more efficient organization and developing solutions to organizational problems;	Non-routine analytical
2421	Management and Organization Analysts	(e) undertaking and reviewing work studies by analysing existing and proposed methods and procedures such as administrative and clerical procedures;	Non-routine analytical
2421	Management and Organization Analysts	(f) recording and analysing organizations' workflow charts, records, reports, manuals and job descriptions;	Non-routine analytical
2421	Management and Organization Analysts	(g) preparing and recommending proposals to revise methods and procedures, alter work flows, redefine job functions and resolve organizational problems;	Non-routine analytical
2421	Management and Organization Analysts	(h) assisting in implementing approved recommendations, issuing revised instructions and procedure manuals and drafting other documentation;	Routine cognitive
2421	Management and Organization Analysts	(i) reviewing operating procedures and advising of departures from procedures and standards.	Routine cognitive

2424	Training and Staff Development Professionals	(a) identifying training needs and requirements of individuals and organizations;	Non-routine analytical
2424	Training and Staff Development Professionals	(b) setting human resource development objectives and evaluating learning outcomes;	Non-routine analytical
2424	Training and Staff Development Professionals	(c) preparing and developing instructional training material and aids such as handbooks, visual aids, online tutorials, demonstration models and supporting training reference documentation;	Non-routine analytical
2424	Training and Staff Development Professionals	(d) 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;	Non-routine interpersonal
2424	Training and Staff Development Professionals	(e) liaising with external training providers to arrange delivery of specific training and development programmes;	Non-routine interpersonal
2424	Training and Staff Development Professionals	(f) promoting internal and external training and development, and evaluating these promotional activities;	Non-routine interpersonal
2424	Training and Staff Development Professionals	(g) 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;	Non-routine analytical
2424	Training and Staff Development Professionals	(h) gathering, investigating and researching background materials to gain an	Non-routine analytical

		understanding of various subject matters and systems.	
2519	Software and Applications Developers and Analysts Not Elsewhere Classified	(a) developing and documenting software testing plans;	Non-routine analytical
2519	Software and Applications Developers and Analysts Not Elsewhere Classified	(b) installing software and hardware and configuring operating system software in preparation for testing;	Routine cognitive
2519	Software and Applications Developers and Analysts Not Elsewhere Classified	(c) verifying that programs function according to user requirements and established guidelines;	Routine cognitive
2519	Software and Applications Developers and Analysts Not Elsewhere Classified	(d) executing, analysing and documenting results of software application tests and information and telecommunication systems tests;	Non-routine analytical
2519	Software and Applications Developers and Analysts Not Elsewhere Classified	(e) developing and implementing software and information system testing policies, procedures and scripts.	Non-routine analytical
2521	Database Designers and Administrators	(a) designing and developing database architecture, data structures, tables, dictionaries and naming conventions for information systems projects;	Non-routine analytical
2521	Database Designers and Administrators	(b) designing, constructing, modifying, integrating, implementing and testing database management systems;	Non-routine analytical

2521	Database Designers and Administrators	(c) conducting research and providing advice on the selection, application and implementation of database management tools;	Non-routine analytical
2521	Database Designers and Administrators	(d) developing and implementing data administration policy, documentation, standards and models;	Non-routine analytical
2521	Database Designers and Administrators	(e) developing policies and procedures for database access and usage and for the backup and recovery of data;	Non-routine analytical
2521	Database Designers and Administrators	(f) performing the operational establishment and preventive maintenance of backups, recovery procedures, and enforcing security and integrity controls.	Routine cognitive
2522	Systems Administrators	(a) maintaining and administering computer networks and related computing environments, including computer hardware, systems software, applications software and all configurations;	Routine cognitive
2522	Systems Administrators	(b) recommending changes to improve systems and network configurations, and determining hardware or software requirements related to such changes;	Non-routine analytical
2522	Systems Administrators	(c) diagnosing hardware and software problems;	Non-routine analytical
2522	Systems Administrators	(d) performing data backups and disaster recovery operations;	Routine cognitive
2522	Systems Administrators	(e) operating master consoles to monitor the performance of computer systems and networks, and to coordinate computer network access and use.	Routine cognitive

2529	Database and Network Professionals Not Elsewhere Classified	(a) developing plans to safeguard computer files against accidental or unauthorized modification, destruction or disclosure and to meet emergency data processing needs;	Non-routine analytical
2529	Database and Network Professionals Not Elsewhere Classified	(b) training users and promoting security awareness to ensure system security and to improve server and network efficiency;	Non-routine interpersonal
2529	Database and Network Professionals Not Elsewhere Classified	(c) conferring with users to discuss issues such as computer data access needs, security violations and programming changes;	Non-routine interpersonal
2529	Database and Network Professionals Not Elsewhere Classified	(d) monitoring current reports of computer viruses to determine when to update virus protection systems;	Routine cognitive
2529	Database and Network Professionals Not Elsewhere Classified	(e) modifying computer security files to incorporate new software, correct errors or change individual access status;	Non-routine analytical
2529	Database and Network Professionals Not Elsewhere Classified	(f) monitoring use of data files and regulate access to safeguard information in computer files;	Routine cognitive
2529	Database and Network Professionals Not Elsewhere Classified	(g) performing risk assessments and executing tests of data processing system to ensure functioning of data processing activities and security measures;	Non-routine analytical
2529	Database and Network Professionals Not Elsewhere Classified	(h) encrypting data transmissions and erecting firewalls to conceal confidential information as it is being transmitted and to keep out tainted digital transfers.	Routine cognitive



2611	Lawyers	(a) giving clients legal advice on a wide variety of subjects and undertaking legal business on clients' behalf;	Non-routine analytical
2611	Lawyers	(b) researching legal principles, statutes and previous court decisions related to specific cases;	Non-routine analytical
2611	Lawyers	(c) 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;	Non-routine interpersonal
2611	Lawyers	(d) evaluating findings and developing strategies and arguments in preparation for presentation of cases;	Non-routine analytical
2611	Lawyers	(e) pleading clients' cases before courts of law, tribunals and administrative boards or instructing barristers to plead in higher courts of justice;	Non-routine interpersonal
2611	Lawyers	(f) accepting briefs and pleading in the higher court;	Non-routine interpersonal
2611	Lawyers	(g) acting as prosecutor on behalf of the government;	Non-routine interpersonal
2611	Lawyers	(h) negotiating settlements in matters which involve legal disputes;	Non-routine interpersonal
2611	Lawyers	(i) drafting legislation and preparing government regulations based on existing laws;	Non-routine analytical
2611	Lawyers	(j) drawing up legal documents such as contracts, real estate transactions and wills and preparing statements of legal opinions.	Non-routine analytical
2612	Judges	(a) presiding over trials and hearings;	Non-routine interpersonal
2612	Judges	(b) interpreting and enforcing rules of procedure and making rulings regarding the admissibility of evidence;	Non-routine analytical

2612	Judges	(c) determining the rights and obligations of the parties involved, and in cases tried by jury;	Non-routine analytical
2612	Judges	(d) instructing the jury on points of law that are applicable to the case;	Non-routine interpersonal
2612	Judges	(e) weighing and considering evidence in non-jury trials and deciding legal guilt or innocence or degree of liability of the accused or defendant;	Non-routine analytical
2612	Judges	(f) passing sentence on persons convicted in criminal cases, determining damages or other appropriate remedy in civil cases and issuing court orders;	Non-routine analytical
2612	Judges	(g) researching legal issues and writing opinions on the issues.	Non-routine analytical
2619	Legal Professionals Not Elsewhere Classified	(a) giving advice on legal aspects of various personal, business and administrative problems;	Non-routine analytical
2619	Legal Professionals Not Elsewhere Classified	(b) drawing up legal documents and contracts;	Non-routine analytical
2619	Legal Professionals Not Elsewhere Classified	(c) arranging property transfers;	Routine cognitive
2619	Legal Professionals Not Elsewhere Classified	(d) determining, by inquest, the causes of any death not obviously due to natural causes.	Non-routine analytical
2621	Archivists and Curators	(a) evaluating and preserving records for administrative, historical, legal, evidential and other purposes;	Routine cognitive

2621	Archivists and Curators	(b) 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;	Routine cognitive
2621	Archivists and Curators	(c) researching the origin, distribution and use of materials and objects of cultural and historical interest;	Non-routine analytical
2621	Archivists and Curators	(d) organizing, developing and maintaining collections of artistic, cultural, scientific or historically significant items;	Non-routine analytical
2621	Archivists and Curators	(e) directing or undertaking classification and cataloguing of museum and art gallery collections and organizing exhibitions;	Routine cognitive
2621	Archivists and Curators	(f) researching into, appraising, organizing and preserving historically significant and valuable documents such as government papers, private papers, photographs, maps, manuscripts and audiovisual materials;	Non-routine analytical
2621	Archivists and Curators	(g) preparing scholarly papers and reports;	Non-routine analytical
2621	Archivists and Curators	(h) planning and implementing the computerized management of archives and electronic records;	Non-routine analytical
2621	Archivists and Curators	(i) organizing exhibitions at museums and art galleries, publicizing exhibits and arranging special displays for general, specialized or educational interest;	Non-routine interpersonal
2621	Archivists and Curators	(j) appraising and acquiring archival materials to build and develop an archival collection for research purposes.	Non-routine analytical

2622	Librarians and Related Information Professionals	(a) organizing, developing and maintaining a systematic collection of books, periodicals and other printed, audiovisually and digitally recorded material;	Non-routine analytical
2622	Librarians and Related Information Professionals	(b) selecting and recommending acquisitions of books and other printed or audiovisually and digitally recorded material;	Non-routine analytical
2622	Librarians and Related Information Professionals	(c) organizing, classifying and cataloguing library material;	Routine cognitive
2622	Librarians and Related Information Professionals	(d) managing library borrowing and interlibrary loan facilities and information networks;	Routine cognitive
2622	Librarians and Related Information Professionals	(e) retrieving material and providing information to business and other users based on the collection itself or on library and information-network systems;	Routine cognitive
2622	Librarians and Related Information Professionals	(f) conducting research and analysing or modifying library and information services in accordance with changes in users' needs;	Non-routine analytical
2622	Librarians and Related Information Professionals	(g) devising and implementing schemes and conceptual models for the storage, organization, classification and retrieval of information;	Non-routine analytical
2622	Librarians and Related Information Professionals	(h) preparing scholarly papers and reports;	Non-routine analytical
2622	Librarians and Related Information Professionals	(i) performing manual, online and interactive media reference searches, making interlibrary loans and performing other functions to	Non-routine analytical

		assist users in accessing library materials.	
2631	Economists	(a) forecasting changes in the economic environment for short-term budgeting, long-term planning and investment evaluation;	Non-routine analytical
2631	Economists	(b) formulating recommendations, policies and plans for the economy, corporate strategies and investment, and undertaking feasibility studies for projects;	Non-routine analytical
2631	Economists	(c) monitoring economic data to assess the effectiveness, and advise on the appropriateness, of monetary and fiscal policies;	Non-routine analytical
2631	Economists	(d) forecasting production and consumption of specific products and services based on records of past production and consumption and general economic and industry-specific conditions;	Non-routine analytical
2631	Economists	(e) preparing forecasts of income and expenditure, interest rates and exchange rates;	Non-routine analytical
2631	Economists	(f) analysing factors that determine labour force participation, employment, wages, unemployment and other labour market outcomes;	Non-routine analytical
2631	Economists	(g) applying mathematical formulae and statistical techniques to test economic theories and devise solutions to economic problems;	Non-routine analytical
2631	Economists	(h) compiling, analysing and interpreting economic data using economic theory and a	Non-routine analytical

		variety of statistical and other techniques;	
2631	Economists	(i) evaluating the outcome of political decisions concerning public economy and finances, and advising on economic policy and possible courses of action in the light of past, present and projected economic factors and trends;	Non-routine analytical
2631	Economists	(j) preparing scholarly papers and reports;	Non-routine analytical
2631	Economists	(k) examining problems related to the economic activities of individual companies;	Non-routine analytical
2631	Economists	(l) 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.	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(a) conducting research on the origin, development, structure, social patterns, organizations and interrelationships of human society;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(b) tracing the origin and evolution of humanity through the study of changing characteristics and cultural and social institutions;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(c) tracing the development of humanity through the material remains of its past, such as dwellings, temples, tools, pottery, coins, weapons or sculpture;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(d) studying physical and climatic aspects of areas and regions, and correlating these	Non-routine analytical

		findings with economic, social and cultural activities;	
2632	Sociologists, Anthropologists and Related Professionals	(e) developing theories, models and methods to interpret and describe social phenomena;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(f) evaluating the outcome of political decisions concerning social policy;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(g) analysing and evaluating social data;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(h) advising on the practical application of findings in the formulation of economic and social policies for population groups and regions, and for the development of markets;	Non-routine analytical
2632	Sociologists, Anthropologists and Related Professionals	(i) preparing scholarly papers and reports.	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(a) researching, including 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;	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(b) consulting and comparing primary sources such as original or contemporary records of past events, and secondary sources such as archaeological or anthropological findings;	Non-routine analytical

2633	Philosophers, Historians and Political Scientists	(c) 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;	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(d) conducting research in such fields as political philosophy, or past and present theory and practice of political systems, institutions or behaviour;	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(e) 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;	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(f) developing theories, models and methods to interpret and describe the nature of human experience and historical and political events and behaviour;	Non-routine analytical
2633	Philosophers, Historians and Political Scientists	(g) presenting findings and conclusions for publication or use by government, political parties or other organizations and interested persons;	Non-routine interpersonal
2633	Philosophers, Historians and Political Scientists	(h) preparing scholarly papers and reports.	Non-routine analytical
2634	Psychologists	(a) 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;	Non-routine analytical



2634	Psychologists	(b) analysing the effect of heredity, social, occupational and other factors on individual thought and behaviour;	Non-routine analytical
2634	Psychologists	(c) conducting counselling or therapeutic interviews with individuals and groups and providing follow-up services;	Non-routine interpersonal
2634	Psychologists	(d) maintaining required contacts, such as those with family members, educational authorities or employers, and recommending possible solutions to, and treatment of, problems;	Non-routine interpersonal
2634	Psychologists	(e) studying psychological factors in the diagnosis, treatment and prevention of mental illnesses and emotional or personality disorders, and conferring with related professionals;	Non-routine analytical
2634	Psychologists	(f) preparing scholarly papers and reports;	Non-routine analytical
2634	Psychologists	(g) formulating achievement, diagnostic and predictive tests for use by teachers in planning methods and content of instruction;	Non-routine analytical
2634	Psychologists	(h) conducting surveys and research studies on job design, work groups, morale, motivation, supervision and management;	Non-routine analytical
2634	Psychologists	(i) developing theories, models and methods to interpret and describe human behaviour.	Non-routine analytical
2643	Translators, Interpreters and Other Linguists	(a) studying relationships between ancient parent languages and modern language groups, tracing the origin and evolution of words, grammar and language forms, and presenting findings;	Non-routine analytical

2643	Translators, Interpreters and Other Linguists	(b) advising on or preparing language classification systems, grammars, dictionaries and similar materials;	Non-routine analytical
2643	Translators, Interpreters and Other Linguists	(c) 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;	Routine cognitive
2643	Translators, Interpreters and Other Linguists	(d) developing methods for the use of computers and other instruments to improve productivity and quality of translation;	Non-routine analytical
2643	Translators, Interpreters and Other Linguists	(e) 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;	Non-routine analytical
2643	Translators, Interpreters and Other Linguists	(f) revising and correcting translated material.	Routine cognitive
2655	Actors	(a) learning lines and cues and playing parts in dramatic productions on stage, commercials, television, radio or in motion pictures;	Routine cognitive
2655	Actors	(b) assuming characters created by a playwright or author and communicating this to an audience;	Non-routine interpersonal

2655	Actors	(c) telling stories or reading literary works aloud to educate or entertain listeners;	Routine cognitive
2655	Actors	(d) attending auditions and casting calls in order to audition for roles;	Non-routine interpersonal
2655	Actors	(e) preparing for performances through rehearsals under the instruction and guidance of production directors;	Non-routine interpersonal
2655	Actors	(f) reading scripts and undertaking research to gain understanding of parts, themes and characteristics;	Non-routine analytical
2655	Actors	(g) acting parts and portraying roles as developed in rehearsals in film, television, radio and stage productions.	Non-routine interpersonal
3116	Chemical Engineering Technicians	(a) assisting in research on and development of industrial chemical processes, plant and equipment, or testing prototypes;	Non-routine analytical
3116	Chemical Engineering Technicians	(b) designing and preparing layouts of chemical plants according to the specifications given;	Non-routine analytical
3116	Chemical Engineering Technicians	(c) preparing detailed estimates of quantities and costs of materials and labour required for manufacture and installation, according to the specifications given;	Non-routine analytical
3116	Chemical Engineering Technicians	(d) monitoring technical aspects of the construction, installation, operation, maintenance and repair of chemical plants to ensure satisfactory performance and compliance with specifications and regulations;	Routine cognitive

3116	Chemical Engineering Technicians	(e) conducting chemical and physical laboratory tests to assist scientists and engineers in making qualitative and quantitative analyses of solids, liquids, and gaseous materials.	Routine cognitive
3121	Mining Supervisors	(a) supervising and coordinating the activities of workers who extract minerals and other natural deposits from the earth, and who operate underground conveyances or heavy equipment in surface mines and quarries;	Non-routine interpersonal
3121	Mining Supervisors	(b) establishing methods to meet work schedules and recommending measures to mining managers to improve productivity;	Non-routine analytical
3121	Mining Supervisors	(c) working with managerial and technical personnel, other departments and contractors to resolve operational problems and coordinate activities;	Non-routine interpersonal
3121	Mining Supervisors	(d) providing reports and other information to mining managers about all aspects of mining or quarrying operations;	Non-routine analytical
3121	Mining Supervisors	(e) determining staffing and material needs for the mine or quarry.	Non-routine analytical
3134	Petroleum and Natural Gas Refining Plant Operators	(a) operating electronic or computerized control panels from a central control room to monitor and optimize physical and chemical processes for several processing units;	Routine manual
3134	Petroleum and Natural Gas Refining Plant Operators	(b) adjusting equipment, valves, pumps, controls and process equipment;	Routine manual

3134	Petroleum and Natural Gas Refining Plant Operators	(c) controlling process start-up and shut-down, troubleshooting and monitoring outside process equipment;	Routine manual
3134	Petroleum and Natural Gas Refining Plant Operators	(d) verifying equipment for malfunctions, testing well pipes for leaks and fractures and arranging for maintenance;	Routine cognitive
3134	Petroleum and Natural Gas Refining Plant Operators	(e) analysing sample products, performing tests, recording data and writing production logs.	Non-routine analytical
3135	Metal Production Process Controllers	(a) coordinating and monitoring the operation of a particular aspect of metal processing production through control panels, computer terminals or other control systems, usually from a central control room;	Non-routine interpersonal
3135	Metal Production Process Controllers	(b) operating multi-function central process control machinery to grind, separate, filter, melt, roast, treat, refine or otherwise process metals;	Routine manual
3135	Metal Production Process Controllers	(c) observing computer printouts, video monitors and gauges to verify specified processing conditions and to make necessary adjustments;	Routine cognitive
3135	Metal Production Process Controllers	(d) coordinating and supervising production crew such as machine and process operators, assistants and helpers;	Non-routine interpersonal
3135	Metal Production Process Controllers	(e) starting up and shutting down the production system in cases of emergency or as required by schedule;	Routine cognitive
3135	Metal Production Process Controllers	(f) providing and organizing training for members of production crews;	Non-routine interpersonal

3135	Metal Production Process Controllers	(g) maintaining shift logs of production and other data and preparing production and other reports.	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(a) assisting in designing, setting up and conducting experiments;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(b) setting up, calibrating, operating and maintaining laboratory instruments and equipment;	Routine manual
3141	Life Science Technicians (excluding Medical)	(c) collecting and preparing specimens and samples, chemical solutions and slides and growing cultures for use in experiments;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(d) performing routine field and laboratory tests;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(e) monitoring experiments to ensure adherence to correct laboratory quality control procedures and health and safety guidelines;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(f) making observations of tests and analysing, calculating, recording and reporting test results using appropriate scientific methods;	Non-routine analytical
3141	Life Science Technicians (excluding Medical)	(g) preserving, classifying and cataloguing specimens and samples;	Non-routine analytical
3141	Life Science Technicians (excluding Medical)	(h) keeping detailed logs of work performed;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(i) using computers to develop models and analyse data;	Non-routine analytical

3141	Life Science Technicians (excluding Medical)	(j) using complex and high-powered equipment to perform work;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(k) participating in the research, development and manufacture of products and processes;	Non-routine analytical
3141	Life Science Technicians (excluding Medical)	(l) ordering and stocking laboratory supplies;	Routine cognitive
3141	Life Science Technicians (excluding Medical)	(m) maintaining relevant databases.	Routine cognitive
3143	Forestry Technicians	(a) conducting forest inventories, surveys and field measurements following accepted scientific and operational procedures;	Routine cognitive
3143	Forestry Technicians	(b) assisting in and performing technical functions in the preparation of forest management and harvest plans using photogrammetric and mapping techniques and computerized information systems;	Non-routine analytical
3143	Forestry Technicians	(c) assisting in planning and supervision of construction of access routes and forest roads;	Non-routine interpersonal
3143	Forestry Technicians	(d) implementing, supervising and performing technical functions in silvicultural operations involving site preparation, planting, and tending of tree crops;	Non-routine interpersonal
3143	Forestry Technicians	(e) coordinating activities such as timber scaling, forest fire suppression, disease or insect control or pre-commercial thinning of forest stands;	Non-routine interpersonal

3143	Forestry Technicians	(f) supervising and performing technical functions in forest harvesting operations;	Non-routine interpersonal
3143	Forestry Technicians	(g) ensuring adherence to regulations and policies concerning environmental protection, resource utilization, fire safety and accident prevention;	Routine cognitive
3143	Forestry Technicians	(h) supervising forest tree nursery operations;	Non-routine interpersonal
3143	Forestry Technicians	(i) providing technical support to forestry research programmes in areas such as tree improvement, seed orchard operations, insect and disease surveys or experimental forestry and forest engineering research;	Non-routine analytical
3143	Forestry Technicians	(j) preparing forest cultivation and cutting plans.	Non-routine analytical
3153	Aircraft Pilots and Related Associate Professionals	(a) flying and navigating aircraft in accordance with established control and operating procedures;	Non-routine manual physical
3153	Aircraft Pilots and Related Associate Professionals	(b) preparing and submitting flight plans or examining standard flight plans;	Non-routine analytical
3153	Aircraft Pilots and Related Associate Professionals	(c) controlling the operation of mechanical, electrical and electronic equipment and ensuring that all instruments and controls work properly;	Routine manual
3153	Aircraft Pilots and Related Associate Professionals	(d) applying knowledge of principles and practices of flying in order to identify and solve problems arising in the course of their work;	Non-routine analytical
3153	Aircraft Pilots and Related Associate Professionals	(e) examining maintenance records and conducting inspections to ensure that aircraft are mechanically sound, maintenance has been	Routine cognitive



		performed and that all equipment is operational;	
3153	Aircraft Pilots and Related Associate Professionals	(f) signing necessary certificates and maintaining official records of flight;	Routine cognitive
3153	Aircraft Pilots and Related Associate Professionals	(g) obtaining briefings and clearances before flights and maintaining contact with air traffic or flight control during flight.	Routine cognitive
3154	Air Traffic Controllers	(a) directing and controlling aircraft approaching and leaving airport and their movement on the ground;	Non-routine manual physical
3154	Air Traffic Controllers	(b) directing and controlling aircraft operating in designated airspace sectors;	Routine cognitive
3154	Air Traffic Controllers	(c) examining and approving flight plans;	Non-routine analytical
3154	Air Traffic Controllers	(d) informing flight crew and operations staff about weather conditions, operational facilities, flight plans and air traffic;	Non-routine interpersonal
3154	Air Traffic Controllers	(e) applying knowledge of principles and practices of air traffic control in order to identify and solve problems arising in the course of their work;	Non-routine analytical
3154	Air Traffic Controllers	(f) initiating and organizing emergency, search and rescue services and procedures;	Non-routine manual physical
3154	Air Traffic Controllers	(g) directing activities of all aircraft and service vehicles on or near airport runways;	Non-routine interpersonal

3154	Air Traffic Controllers	(h) 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.	Routine cognitive
3155	Air Traffic Safety Electronics Technicians	(a) carrying out technical duties related to the development of electronic and computerized air navigation systems and equipment, and testing prototypes;	Routine cognitive
3155	Air Traffic Safety Electronics Technicians	(b) providing technical help in the design and layout of specific interface circuitry of air navigation and aircraft detection tracking systems;	Routine cognitive
3155	Air Traffic Safety Electronics Technicians	(c) preparing and contributing to the preparation of cost estimates and technical and training specifications for air traffic control and safety equipment;	Non-routine analytical
3155	Air Traffic Safety Electronics Technicians	(d) providing or assisting with the technical supervision of construction, installation and operation of ground-based air navigation equipment and its maintenance and repair to ensure that standards and specifications are met;	Non-routine interpersonal
3155	Air Traffic Safety Electronics Technicians	(e) applying the knowledge and skills of air traffic safety engineering principles and practices in order to identify and solve problems arising in the course of their work;	Non-routine analytical
3155	Air Traffic Safety Electronics Technicians	(f) developing, modifying and debugging system software;	Non-routine analytical

3155	Air Traffic Safety Electronics Technicians	(g) modifying existing ground-based air navigation systems and equipment to adapt them to new air traffic control procedures, in order to improve capability, reliability and integrity, or to facilitate air traffic control procedures and airspace designation;	Non-routine analytical
3155	Air Traffic Safety Electronics Technicians	(h) controlling, monitoring and certifying communication navigation and surveillance air traffic management equipment, and calibrating the ground-based air navigation system to ensure maximum accuracy and safety of flight, take-off and landing operations;	Routine cognitive
3155	Air Traffic Safety Electronics Technicians	(i) providing technical training and supervising other workers.	Non-routine interpersonal
3211	Medical Imaging and Therapeutic Equipment Technicians	(a) operating or overseeing operation of radiologic, ultrasound and magnetic imaging equipment to produce images of the body for diagnostic purposes;	Non-routine interpersonal
3211	Medical Imaging and Therapeutic Equipment Technicians	(b) explaining procedures, observing and positioning patients, and using protection devices to ensure safety and comfort during examination, scan or treatment;	Non-routine interpersonal
3211	Medical Imaging and Therapeutic Equipment Technicians	(c) positioning imaging or treatment equipment, monitoring video displays, and adjusting settings and controls according to technical specifications;	Routine cognitive

3211	Medical Imaging and Therapeutic Equipment Technicians	(d) reviewing and evaluating developed X-rays, videotape, or computer-generated information to determine if images are satisfactory for diagnostic purposes, and recording results of procedures;	Non-routine analytical
3211	Medical Imaging and Therapeutic Equipment Technicians	(e) monitoring patients' conditions and reactions, reporting abnormal signs to a medical practitioner;	Routine cognitive
3211	Medical Imaging and Therapeutic Equipment Technicians	(f) measuring and recording radiation dosage or radiopharmaceuticals received and used for patients, following prescriptions issued by a medical practitioner;	Non-routine analytical
3211	Medical Imaging and Therapeutic Equipment Technicians	(g) administering, detecting and mapping radiopharmaceuticals or radiation in patients' bodies, using radioisotope, camera or other equipment for diagnosing and treating diseases;	Routine cognitive
3211	Medical Imaging and Therapeutic Equipment Technicians	(h) recording and disposing of radioactive materials and storing radiopharmaceuticals, following radiation safety procedures.	Routine cognitive
3221	Nursing Associate professionals	(a) providing nursing and personal care and treatment and health advice to patients according to care plans established by health professionals;	Routine cognitive
3221	Nursing Associate professionals	(b) administering medications and other treatments to patients, monitoring patients' condition and responses to treatment, and referring patients and their families to a health professional for specialized care as needed;	Routine cognitive

3221	Nursing Associate professionals	(c) cleaning wounds and applying surgical dressings;	Non-routine manual physical
3221	Nursing Associate professionals	(d) updating information on patients' condition and treatments received in record-keeping systems;	Routine cognitive
3221	Nursing Associate professionals	(e) assisting in planning and managing the care of individual patients;	Non-routine interpersonal
3221	Nursing Associate professionals	(f) assisting in giving first-aid treatment in emergencies.	Non-routine manual physical
3222	Midwifery Associate professionals	(a) providing advice to women, families and communities on health, nutrition, hygiene, exercise, birth and emergency plans, breastfeeding, infant care, family planning and contraception, lifestyle and other topics related to pregnancy and childbirth;	Non-routine analytical
3222	Midwifery Associate professionals	(b) assessing progress during pregnancy and childbirth, and recognizing signs and symptoms requiring referral to a health professional;	Routine cognitive
3222	Midwifery Associate professionals	(c) providing delivery care, usually only in the absence of identified potential complications, or assisting medical doctors or midwifery professionals with delivery care;	Non-routine manual physical
3222	Midwifery Associate professionals	(d) providing care and support to women and newborns following childbirth, monitoring their health status, and identifying signs and symptoms requiring referral to a health professional.	Routine cognitive

3230	Traditional and Complementary Medicine Associate Professionals	(a) examining patients and interviewing them and their families to determine their health status and the nature of physical or mental disorders or illnesses or other ailments;	Non-routine interpersonal
3230	Traditional and Complementary Medicine Associate Professionals	(b) recommending and providing care and treatment for illnesses and other ailments using traditional techniques and medicaments, such as physical manipulation and exercises, blood-letting using natural vessels, and preparations using herbs, plants, insects and animal extracts;	Non-routine analytical
3230	Traditional and Complementary Medicine Associate Professionals	(c) administering treatments such as acupuncture, ayurvedic, homeopathic and herbal medicine according to therapeutic care plans and procedures usually developed by a traditional medicine or other health professional;	Routine cognitive
3230	Traditional and Complementary Medicine Associate Professionals	(d) providing care and treatment for physical injuries such as setting and healing fractured and dislocated bones using traditional methods of physical manipulation and herbal therapies;	Non-routine manual physical
3230	Traditional and Complementary Medicine Associate Professionals	(e) advising individuals, families and the community on health, nutrition, hygiene, lifestyle and other issues to maintain or improve health and well-being;	Non-routine analytical
3230	Traditional and Complementary Medicine Associate Professionals	(f) referring patients to, and exchanging information with, other health care providers to ensure comprehensive and continuing care.	Non-routine interpersonal
3256	Medical Assistants	(a) interviewing patients and their families to obtain	Non-routine interpersonal

		information on their health status and medical history;	
3256	Medical Assistants	(b) assisting medical doctors and other health professionals to examine and treat patients, including measuring and recording vital signs, administering medications and performing routine clinical procedures such as giving injections and removing sutures;	Routine cognitive
3256	Medical Assistants	(c) getting patients ready for examination and treatment, including explaining procedures and showing them to examination rooms;	Non-routine interpersonal
3256	Medical Assistants	(d) preparing and handling medical instruments and supplies, including sterilizing instruments and disposing of contaminated supplies in accordance with safety procedures;	Routine cognitive
3256	Medical Assistants	(e) collecting blood, tissue or other specimens, and preparing them for laboratory testing;	Routine cognitive
3256	Medical Assistants	(f) providing information to patients and families on health care topics including medications prescribed by a medical doctor or other health professional;	Routine cognitive
3256	Medical Assistants	(g) providing prescription and drug refill information to pharmacies;	Routine cognitive
3256	Medical Assistants	(h) maintaining cleanliness of patient waiting and examination rooms;	Routine cognitive
3256	Medical Assistants	(i) recording information on patients' medical history, diagnostic testing and treatment procedures and results, and other information	Routine cognitive

		in medical record-keeping systems;	
3256	Medical Assistants	(j) scheduling appointments with patients, and preparing documentation required for billing, reporting and insurance purposes.	Routine cognitive
3258	Ambulance Workers	(a) assessing the health status of persons involved in accidents, natural disasters and other emergency situations, and determining needs for immediate and specialized medical assistance;	Routine cognitive
3258	Ambulance Workers	(b) performing medical procedures and administering drugs and other therapies according to protocol for emergency medical treatment, including resuscitating and defibrillating patients and operating life-support equipment;	Non-routine interpersonal
3258	Ambulance Workers	(c) monitoring changes in the health status of patients during transport to and from medical, rehabilitation and other health care facilities;	Routine cognitive
3258	Ambulance Workers	(d) providing information and training to community groups and essential service workers in first aid for initial care of an illness or injury;	Non-routine interpersonal
3258	Ambulance Workers	(e) attending and/or patrolling large-scale public gatherings and other events where health emergencies are more likely to occur;	Non-routine manual physical
3258	Ambulance Workers	(f) recording information on patients' conditions and treatments provided in medical record-keeping systems.	Routine cognitive



3259	Health Associate Professionals Not Elsewhere Classified	(a) interviewing and examining patients to obtain information on their health status and the nature and extent of injury, illness or other physical or mental health condition;	Non-routine interpersonal
3259	Health Associate Professionals Not Elsewhere Classified	(b) providing information and counselling to patients and families about certain health conditions, prevention and treatment options, treatment adherence, and personal behaviours that can affect health outcomes;	Non-routine interpersonal
3259	Health Associate Professionals Not Elsewhere Classified	(c) administering therapeutic care and treatment to patients;	Routine cognitive
3259	Health Associate Professionals Not Elsewhere Classified	(d ) performing certain basic clinical procedures such as administration of HIV antibody tests or insertion of intrauterine devices;	Routine cognitive
3259	Health Associate Professionals Not Elsewhere Classified	(e) dispensing and advising on dietary supplements, antiretroviral and prophylaxis medications, and other health care products;	Routine cognitive
3259	Health Associate Professionals Not Elsewhere Classified	(f) monitoring patients' progress through treatment plans, and identifying signs and symptoms requiring referral to a medical doctor or other health professional;	Routine cognitive
3259	Health Associate Professionals Not Elsewhere Classified	(g) recording information on patients' health status and responses to treatment in medical record-keeping systems;	Routine cognitive

3259	Health Associate Professionals Not Elsewhere Classified	(h) sharing information with other health care providers when required to ensure continuing and comprehensive care.	Non-routine interpersonal
3324	Trade Brokers	(a) establishing contact between buyers and sellers of commodities;	Routine cognitive
3324	Trade Brokers	(b) discussing buying or selling requirements of clients and giving advice accordingly;	Routine cognitive
3324	Trade Brokers	(c) buying and selling cargo space on ships;	Routine cognitive
3324	Trade Brokers	(d) negotiating purchase or sale of commodities and commodity futures;	Non-routine interpersonal
3324	Trade Brokers	(e) finding cargo and/or storage space for commodities and negotiating freight, shipping and storage charges;	Non-routine interpersonal
3324	Trade Brokers	(f) monitoring and analysing market trends and other factors affecting the supply and demand for commodities and shipping services.	Non-routine analytical
3333	Employment Agents and Contractors	(a) matching jobseekers with vacancies;	Routine cognitive
3333	Employment Agents and Contractors	(b) finding workers for vacant posts against a commission from the employer or worker;	Non-routine interpersonal
3333	Employment Agents and Contractors	(c) discussing with employers the skills and other characteristics required of the workers to be employed or contracted;	Non-routine interpersonal
3333	Employment Agents and Contractors	(d) finding workers with appropriate skills, and undertaking the necessary formalities according to national or international regulations and requirements;	Non-routine interpersonal
3333	Employment Agents and Contractors	(e) ensuring that the employment contracts meet	Routine cognitive

		legal requirements and signing them;	
3333	Employment Agents and Contractors	(f) advising on training schemes.	Non-routine analytical
3354	Government Licensing Officials	(a) advising individuals on government laws and regulations concerning the type of licence required and the conditions attached to such licences, and on the public's rights and obligations;	Non-routine analytical
3354	Government Licensing Officials	(b) examining applications and relevant documents and determining whether a licence can be granted and the conditions which should be attached;	Routine cognitive
3354	Government Licensing Officials	(c) examining applications and approving the issue of passports;	Routine cognitive
3354	Government Licensing Officials	(d) performing related administrative tasks to process applications, document activities, evaluations and determinations, and to prepare correspondence to inform applicants of licensing decisions;	Routine cognitive
3354	Government Licensing Officials	(e) administering and scoring tests required to license applicants.	Routine cognitive
3353	Government Social Benefits Officials	(a) advising individuals and organizations 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;	Non-routine analytical

3353	Government Social Benefits Officials	(b) examining applications and other relevant documents to determine types and amounts of benefit which individuals are eligible to receive;	Non-routine analytical
3353	Government Social Benefits Officials	(c) assessing documentation and interviewing benefit recipients to ensure eligibility for continuing benefits or services;	Routine cognitive
3353	Government Social Benefits Officials	(d) performing related administrative tasks to maintain client records and prepare reports on determinations regarding eligibility, referral decisions, termination of benefits and abuse or fraud.	Routine cognitive
3423	Fitness and Recreation Instructors and Programme Leaders	(a) planning and carrying out recreational and fitness activities;	Non-routine interpersonal
3423	Fitness and Recreation Instructors and Programme Leaders	(b) monitoring recreational, sports or fitness activities to ensure safety and provide emergency or first aid assistance when required;	Routine cognitive
3423	Fitness and Recreation Instructors and Programme Leaders	(c) evaluating and monitoring clients' abilities and fitness and recommending activities;	Non-routine analytical
3423	Fitness and Recreation Instructors and Programme Leaders	(d) demonstrating and teaching body movements, concepts and skills used in fitness routines and recreational activities;	Non-routine interpersonal
3423	Fitness and Recreation Instructors and Programme Leaders	(e) instructing in the use of equipment;	Non-routine interpersonal

3423	Fitness and Recreation Instructors and Programme Leaders	(f) explaining and enforcing safety procedures, rules and regulations.	Non-routine interpersonal
3433	Gallery, Museum and Library Technicians	(a) mounting and preparing objects for display;	Non-routine manual physical
3433	Gallery, Museum and Library Technicians	(b) designing and arranging exhibit furnishings, display cases and display areas;	Non-routine analytical
3433	Gallery, Museum and Library Technicians	(c) assisting in setting up lighting and display equipment;	Non-routine manual physical
3433	Gallery, Museum and Library Technicians	(d) receiving, shipping, packing and unpacking exhibits;	Routine manual
3433	Gallery, Museum and Library Technicians	(e) ordering new library materials and maintaining library records and circulation systems;	Routine cognitive
3433	Gallery, Museum and Library Technicians	(f) cataloguing printed and recorded material;	Routine cognitive
3433	Gallery, Museum and Library Technicians	(g) entering data into databases and editing computer records;	Routine cognitive
3433	Gallery, Museum and Library Technicians	(h) operating audiovisual and reprographic equipment;	Routine manual
3433	Gallery, Museum and Library Technicians	(i) searching and verifying bibliographic data.	Routine cognitive

3522	Telecommunications Engineering Technicians	(a) providing technical assistance connected with research and the development of telecommunications equipment, or testing prototypes;	Non-routine analytical
3522	Telecommunications Engineering Technicians	(b) studying technical material such as blueprints and sketches to determine the method of work to be adopted;	Non-routine analytical
3522	Telecommunications Engineering Technicians	(c) preparing detailed estimates of quantities and costs of materials and labour required for the manufacture and installation of telecommunications equipment, according to the specifications given;	Non-routine analytical
3522	Telecommunications Engineering Technicians	(d) providing technical supervision of the manufacture, utilization, maintenance and repair of telecommunications systems to ensure satisfactory performance and compliance with specifications and regulations;	Non-routine interpersonal
3522	Telecommunications Engineering Technicians	(e) applying technical knowledge of telecommunications engineering principles and practices in order to identify and solve problems arising in the course of their work.	Non-routine analytical
4223	Telephone Switchboard Operators	(a) operating switchboards and consoles to connect, hold, transfer and disconnect telephone calls;	Routine manual
4223	Telephone Switchboard Operators	(b) making connections for outgoing calls;	Routine cognitive
4223	Telephone Switchboard Operators	(c) dealing with telephone inquiries and recording messages;	Routine cognitive

4223	Telephone Switchboard Operators	(d) forwarding messages to staff or clients;	Routine cognitive
4223	Telephone Switchboard Operators	(e) investigating operating system problems and informing repair services.	Non-routine analytical
4227	Survey and Market Research Interviewers	(a) contacting individuals by telephone or in person and explaining the purpose of the interview;	Non-routine interpersonal
4227	Survey and Market Research Interviewers	(b) asking questions following the outlines of questionnaires and surveys;	Routine cognitive
4227	Survey and Market Research Interviewers	(c) recording responses on paper or entering responses directly into a computer database through computer-assisted interviewing systems;	Routine cognitive
4227	Survey and Market Research Interviewers	(d) identifying and resolving inconsistencies in responses;	Non-routine analytical
4227	Survey and Market Research Interviewers	(e) providing feedback to survey sponsors concerning problems in obtaining valid data.	Non-routine interpersonal
4412	Mail Carriers and Sorting Clerks	(a) performing mail-handling duties in public post offices or privately owned delivery establishments;	Non-routine manual physical
4412	Mail Carriers and Sorting Clerks	(b) sorting and delivering mail to private houses and businesses;	Non-routine manual physical
4412	Mail Carriers and Sorting Clerks	(c) providing delivery confirmation records when requested by the client;	Routine cognitive
4412	Mail Carriers and Sorting Clerks	(d) sorting and keeping simple records of incoming and outgoing correspondence and dispatching outgoing mail in various establishments;	Routine cognitive

4414	Scribes and Related Workers	(a) reading letters and other written matter to persons who are unable to read or write and providing necessary interpretation and information;	Non-routine analytical
4414	Scribes and Related Workers	(b) writing letters and completing forms on behalf of others;	Routine cognitive
4414	Scribes and Related Workers	(c) offering advice to individuals and interpreting and helping with the completion of government and other official forms.	Non-routine analytical
5161	Astrologers, Fortune-tellers and Related Workers	(a) casting horoscopes of individuals at birth or later to recount past and forecast future events and conditions of their lives;	Non-routine interpersonal
5161	Astrologers, Fortune-tellers and Related Workers	(b) 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.;	Non-routine analytical
5161	Astrologers, Fortune-tellers and Related Workers	(c) forecasting future events on the basis of these interpretations;	Non-routine analytical
5161	Astrologers, Fortune-tellers and Related Workers	(d) determining auspicious times for various human activities such as inaugurations, marriages, journeys and religious and other ceremonies;	Non-routine analytical
5161	Astrologers, Fortune-tellers and Related Workers	(e) giving warnings and advice on possible courses of action;	Non-routine analytical
5161	Astrologers, Fortune-tellers and Related Workers	(f) advising individuals on precautions to be taken to avoid evil influences.	Non-routine analytical



5162	Companions and Valets	(a) providing companionship to the employer by accompanying him/her to various places, reading, conversing and participating in activities such as sports;	Non-routine interpersonal
5162	Companions and Valets	(b) assisting in entertaining visitors in the employer's home;	Routine cognitive
5162	Companions and Valets	(c) keeping wardrobe and personal effects of the employer in good order.	Non-routine manual physical
5164	Pet Groomers and Animal Care Workers	(a) bathing and feeding animals;	Non-routine manual physical
5164	Pet Groomers and Animal Care Workers	(b) leading or carrying animals to treatment rooms and holding them during treatment;	Non-routine interpersonal
5164	Pet Groomers and Animal Care Workers	(c) cleaning and sterilizing veterinary surgical instruments;	Non-routine manual physical
5164	Pet Groomers and Animal Care Workers	(d) labelling drugs, chemicals and other pharmaceutical preparations and replenishing stock;	Routine cognitive
5164	Pet Groomers and Animal Care Workers	(e) sterilizing bottles, beakers and other equipment;	Non-routine manual physical
5164	Pet Groomers and Animal Care Workers	(f) cleaning, organizing and disinfecting animal quarters such as pens, stables, cages and yards, and animal equipment such as saddles and bridles;	Non-routine manual physical
5164	Pet Groomers and Animal Care Workers	(g) collecting and recording animal information such as weight, size, physical condition, treatments received, medications given and food intake;	Routine cognitive
5164	Pet Groomers and Animal Care Workers	(h) training animals to develop and maintain desired behaviours for competition, entertainment, obedience,	Non-routine interpersonal

		security, riding and other activities;	
5164	Pet Groomers and Animal Care Workers	(i) grooming animals by performing tasks such as washing, brushing, clipping and trimming coats, cutting nails and cleaning ears.	Non-routine manual physical
5165	Driving Instructors	(a) instructing students under actual driving conditions, and explaining and demonstrating the operation of brakes, clutch, gear selection, automatic transmission, signals and lights;	Non-routine interpersonal
5165	Driving Instructors	(b) teaching road traffic regulations;	Non-routine interpersonal
5165	Driving Instructors	(c) teaching road craft and road safety;	Non-routine interpersonal
5165	Driving Instructors	(d) advising students when they are ready to undergo driving examination;	Non-routine analytical
5165	Driving Instructors	(e) advising on and teaching advanced driving techniques required for emergency situations;	Non-routine analytical
5165	Driving Instructors	(f) illustrating and explaining handling and mechanical operation of motor vehicles and driving techniques, using blackboard diagrams and audiovisual aids.	Non-routine interpersonal
5241	Fashion and Other Models	(a) dressing in sample apparel of new or current styles or of type wanted by customer;	Non-routine interpersonal
5241	Fashion and Other Models	(b) walking, turning and posing to demonstrate, to best advantage, style and characteristics of garments, fashion accessories and other merchandise;	Non-routine interpersonal
5241	Fashion and Other Models	(c) posing as subject for sculpture, painting and other types of visual art;	Non-routine interpersonal

5241	Fashion and Other Models	(d) posing for still photography for magazines and other advertising media;	Non-routine interpersonal
5241	Fashion and Other Models	(e) posing for television, video and cinema commercials and other productions.	Non-routine interpersonal
6210	Forestry and Related Workers	(a) assessing sites for reforestation, selecting seedlings and planting trees using manual planting tools and establishing and caring for forest stands;	Non-routine analytical
6210	Forestry and Related Workers	(b) locating trees to be felled and estimating volume of timber;	Non-routine analytical
6210	Forestry and Related Workers	(c) operating chainsaw and other power saws to thin young forest stands, trim, top and fell trees and saw them into logs;	Routine manual
6210	Forestry and Related Workers	(d) shaping rough wooden products from logs at felling site;	Non-routine manual physical
6210	Forestry and Related Workers	(e) stacking logs and loading them in chutes or floating them down rivers;	Routine manual
6210	Forestry and Related Workers	(f) keeping watch to detect forest fires, participating in fire fighting operations, completing fire fighting reports and maintaining fire fighting equipment;	Non-routine interpersonal
6210	Forestry and Related Workers	(g) controlling weeds and undergrowth in regenerating forest stands using manual tools and chemicals;	Non-routine manual physical
6210	Forestry and Related Workers	(h) operating and maintaining a skidder, bulldozer or other prime mover to pull a variety of scarification or site preparation equipment over areas to be regenerated;	Routine manual

6210	Forestry and Related Workers	(i) collecting seed cones, pruning trees, assisting in planting surveys and marking trees for subsequent operations;	Non-routine manual physical
6210	Forestry and Related Workers	(j) training and supervising other workers in forestry procedures, including forestry labourers and plant operators.	Non-routine interpersonal
6222	Inland and Coastal Waters Fishery Workers	(a) preparing and repairing nets and other fishing gear and equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	(b) selecting areas for fishing, plotting courses and computing navigational positions using compass, charts and other aids;	Routine cognitive
6222	Inland and Coastal Waters Fishery Workers	(c) operating fishing vessels to, from and at fishing grounds;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	(d) baiting, setting, operating and hauling in fishing gear by hand or using hoisting equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	(e) gathering various forms of aquatic life from shores and shallow waters;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	(f) maintaining engine fishing gear and other on-board equipment;	Non-routine manual physical
6222	Inland and Coastal Waters Fishery Workers	(g) keeping records of transactions, fishing activities, weather and sea conditions, and estimating costs and budgets;	Routine cognitive
6222	Inland and Coastal Waters Fishery Workers	(h) sorting and storing catch in holds with salt and ice;	Routine manual
6222	Inland and Coastal Waters Fishery Workers	(i) removing catches from fishing equipment, measuring them to ensure compliance with legal size and returning undesirable or illegal catches to the water;	Routine cognitive

6222	Inland and Coastal Waters Fishery Workers	(j) directing fishing operations, and supervising fishing crew members.	Non-routine interpersonal
6223	Deep-sea Fishery Workers	(a) preparing and repairing nets and other fishing gear and equipment;	Non-routine manual physical
6223	Deep-sea Fishery Workers	(b) commanding and operating fishing vessels to, from and at deep-sea fishing grounds;	Non-routine manual physical
6223	Deep-sea Fishery Workers	(c) determining areas for fishing, plotting courses and computing navigational positions using compass, charts, tables and other aids;	Routine cognitive
6223	Deep-sea Fishery Workers	(d) steering vessels and operating navigational instruments and electronic fishing aids;	Non-routine manual physical
6223	Deep-sea Fishery Workers	(e) directing fishing operations and supervising crew activities;	Non-routine interpersonal
6223	Deep-sea Fishery Workers	(f) recording fishing progress and activities, as well as weather and sea conditions, on the ship's log;	Routine cognitive
6223	Deep-sea Fishery Workers	(g) baiting, setting and hauling in fishing gear;	Non-routine manual physical
6223	Deep-sea Fishery Workers	(h) cleaning, freezing, icing or salting catch on- or offshore;	Non-routine manual physical
6223	Deep-sea Fishery Workers	(i) selecting and training vessel crews.	Non-routine interpersonal
6224	Hunters and Trappers	(a) setting traps to catch mammals, birds or reptiles;	Non-routine manual physical
6224	Hunters and Trappers	(b) killing trapped or free mammals, birds or reptiles with firearms or other weapons;	Non-routine manual physical
6224	Hunters and Trappers	(c) skinning and otherwise treating killed mammals, birds or reptiles to obtain desired products for sale or delivery;	Non-routine manual physical
6224	Hunters and Trappers	(d) delivering or selling trapped live mammals, birds or reptiles;	Routine cognitive

6224	Hunters and Trappers	(e) repairing and maintaining equipment.	Non-routine manual physical
6310	Subsistence Crop Farmers	(a) preparing the soil, sowing, planting, tending and harvesting field crops;	Non-routine manual physical
6310	Subsistence Crop Farmers	(b) growing vegetables, fruit and other tree and shrub crops;	Non-routine manual physical
6310	Subsistence Crop Farmers	(c) fetching water and gathering firewood;	Non-routine manual physical
6310	Subsistence Crop Farmers	(d) storing for later use and carrying out some processing of produce;	Non-routine manual physical
6310	Subsistence Crop Farmers	(e) building and maintaining houses and other shelters;	Non-routine manual physical
6310	Subsistence Crop Farmers	(f) making tools, clothes and utensils for use by the household;	Non-routine manual physical
6310	Subsistence Crop Farmers	(g) selling or bartering some products at local markets.	Routine cognitive
6320	Subsistence Livestock Farmer	(a) cultivating pastures, or managing grazing lands, and monitoring feed and water supplies needed to maintain condition of livestock;	Routine cognitive
6320	Subsistence Livestock Farmer	(b) monitoring and examining animals to detect illness, injury or disease, and to check physical condition;	Routine cognitive
6320	Subsistence Livestock Farmer	(c) grooming and marking animals and shearing coats to collect hair or wool;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(d) herding or leading livestock to pastures, grazing land and water supplies;	Non-routine interpersonal
6320	Subsistence Livestock Farmer	(e) raising, tending, feeding and milking animals or draining blood from them;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(f) breeding animals and helping with animal births;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(g) slaughtering and skinning animals and preparing them and their products for consumption or sale;	Non-routine manual physical

6320	Subsistence Livestock Farmer	(h) carrying out some processing of animal products;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(i) building and maintaining houses and other shelters;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(j) making tools, clothes and utensils for use by the household;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(k) fetching water and gathering firewood;	Non-routine manual physical
6320	Subsistence Livestock Farmer	(l) buying, bartering and selling animals and some products.	Routine cognitive
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(a) gathering wild fruits, roots, medicinal and other plants;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(b) hunting or trapping animals mainly to obtain meat, milk, hair, skin or other products;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(c) fetching water and gathering firewood;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(d) catching fish and gathering other forms of aquatic life;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(e) storing or carrying out some processing of their produce;	Non-routine manual physical

6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(f) building and maintaining houses and other shelters;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(g) making tools, clothes and utensils for use by the household;	Non-routine manual physical
6340	Subsistence Fishers, Hunters, Trappers and Gatherers	(h) selling or bartering some products at local markets.	Routine cognitive
7111	House Builders	(a) preparing ground for erecting building or other structures;	Non-routine manual physical
7111	House Builders	(b) erecting structures to support roofs, and building and covering walls with appropriate materials;	Non-routine manual physical
7111	House Builders	(c) fixing rafters to roofs and covering with roofing material;	Non-routine manual physical
7111	House Builders	(d) levelling floors to make them smooth and serviceable;	Non-routine manual physical
7111	House Builders	(e) maintaining and repairing existing structures;	Non-routine manual physical
7111	House Builders	(f) arranging for specialized work such as bricklaying, painting, plumbing and electrical wiring to be done by subcontractors;	Non-routine interpersonal
7111	House Builders	(g) coordinating and supervising the activities of subcontractors, labourers and other workers.	Non-routine interpersonal
7114	Concrete Placers, Concrete Finishers and Related Workers	(a) constructing and repairing reinforced concrete floors, walls, tanks, silos and other concrete structures;	Non-routine manual physical



7114	Concrete Placers, Concrete Finishers and Related Workers	(b) making shuttering or assembling prefabricated forms for moulding concrete;	Non-routine manual physical
7114	Concrete Placers, Concrete Finishers and Related Workers	(c) cementing openings in walls or casings for wells;	Non-routine manual physical
7114	Concrete Placers, Concrete Finishers and Related Workers	(d) finishing and smoothing surfaces of concrete structures;	Non-routine manual physical
7114	Concrete Placers, Concrete Finishers and Related Workers	(e) applying a durable smooth surfacing composed of cement, sand pigment and marble particles to floors, known as a terrazzo finish.	Non-routine manual physical
7123	Plasterers	(a) applying one or more coats of plaster to interior walls and ceilings of buildings to produce a finished surface;	Non-routine manual physical
7123	Plasterers	(b) measuring, marking and installing ornamental plaster panels, and casting and trimming ornamental plaster cornices;	Routine cognitive
7123	Plasterers	(c) measuring, marking and cutting plasterboard, lifting and positioning panels and securing them to walls, ceilings and battens;	Routine cognitive
7123	Plasterers	(d) covering joints and nail holes with wet plaster and sealing compounds, and smoothing them using wet brushes and sandpaper;	Non-routine manual physical

7123	Plasterers	(e) applying protective and decorative coverings of cement, plaster and similar materials to exterior building surfaces;	Non-routine manual physical
7123	Plasterers	(f) making and installing decorative plaster fixtures of fibrous plaster;	Non-routine manual physical
7123	Plasterers	(g) applying and finishing acoustic, insulating and fireproofing materials bonded with plaster, plastic cement and similar materials.	Non-routine manual physical
7133	Building Structure Cleaners	(a) cleaning exterior surfaces of stone, brick, metal or similar materials by means of chemicals, or a jet of steam or sand applied under high pressure;	Non-routine manual physical
7133	Building Structure Cleaners	(b) removing soot from flues, chimneys and connecting pipes;	Non-routine manual physical
7133	Building Structure Cleaners	(c) removing asbestos, mould and fire-damaged surfaces from buildings.	Non-routine manual physical
7234	Bicycle and Related Repairers	(a) examining, servicing and repairing bicycles and other non-motorized transport equipment;	Non-routine manual physical
7234	Bicycle and Related Repairers	(b) cleaning and lubricating bearings and other moving parts;	Non-routine manual physical
7234	Bicycle and Related Repairers	(c) replacing and repairing components and accessories such as brakes, gears, driving chain mechanisms, wheels and handlebars;	Non-routine manual physical
7234	Bicycle and Related Repairers	(d) changing tyres and controlling air pressure;	Non-routine manual physical
7234	Bicycle and Related Repairers	(e) spray-painting frames;	Non-routine manual physical

7234	Bicycle and Related Repairers	(f) assembling new bicycles, wheelchairs and similar non-motorized equipment.	Non-routine manual physical
7314	Potters and Related Workers	(a) making articles of pottery and porcelain;	Non-routine manual physical
7314	Potters and Related Workers	(b) making clay or plaster-of-paris moulds;	Non-routine manual physical
7314	Potters and Related Workers	(c) reading technical drawings to know customer's requirements;	Routine cognitive
7314	Potters and Related Workers	(d) forming articles on the potter's wheel by pressing thumbs into centres of revolving clay to form hollows, and pressing on the inside and outside of emerging clay cylinders with hands and fingers, gradually raising and shaping clay to desired forms and sizes;	Non-routine manual physical
7314	Potters and Related Workers	(e) adjusting wheel speeds according to the feel of the clay as pieces enlarge and walls become thinner;	Routine manual
7314	Potters and Related Workers	(f) operating jigger machines to form ceramic ware such as bowls, cups, plates and saucers;	Routine manual
7314	Potters and Related Workers	(g) adjusting and setting controls of pug mills that mix, extrude, cut, and deposit clay charges in or over moulds as specified;	Routine manual
7314	Potters and Related Workers	(h) smoothening surfaces of finished pieces, using rubber scrapers and wet sponges;	Non-routine manual physical
7314	Potters and Related Workers	(i) forming abrasive wheels by moulding and pressing an abrasive mixture by hand or by machine;	Non-routine manual physical

7314	Potters and Related Workers	(j) examining finished ware for defects and verifying accuracy of shapes and sizes of objects, using callipers and templates;	Routine cognitive
7314	Potters and Related Workers	(k) preparing work for sale or exhibition, and maintaining relationships with retail, pottery, art and resource networks that can facilitate sale or exhibition of work.	Non-routine interpersonal
7316	Signwriters, Decorative Painters, Engravers and Etchers	(a) painting decorative freehand designs on objects such as pottery, glass, cigarette cases or lampshades;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(b) transferring decorative or ornamental designs onto articles from paper transfers;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(c) 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;	Non-routine analytical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(d) laying out and painting in one or more languages letters, figures, monograms and designs to make signs;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(e) sketching or tracing designs or lettering onto work pieces or pattern materials to prepare patterns or stencils;	Non-routine analytical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(f) designing patterns or lettering to paint work pieces such as signs, glassware, pottery or zinc plates;	Non-routine analytical

7316	Signwriters, Decorative Painters, Engravers and Etchers	(g) using software and routing equipment to produce three-dimensional carved images for application onto larger signage as well as engraved and inlaid signs;	Routine cognitive
7316	Signwriters, Decorative Painters, Engravers and Etchers	(h) designing and producing normal flat cut lettering, or lettering that is shadowed with applied vinyl, or lettering that is ready cut for application;	Non-routine analytical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(i) writing, painting or printing signs or show cards used for display or other purposes;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(j) cutting out letters and signs for display purposes from wallboard or cardboard, by hand or machines such as electrically powered jigsaws or bandsaws;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(k) examining sketches, diagrams, samples, blueprints or photographs to decide how designs are to be etched, cut or engraved onto work pieces;	Non-routine analytical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(l) measuring and computing dimensions of lettering, designs or patterns to be engraved;	Routine cognitive
7316	Signwriters, Decorative Painters, Engravers and Etchers	(m) 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;	Non-routine manual physical
7316	Signwriters, Decorative Painters, Engravers and Etchers	(n) etching decorative designs, calibration markings and other figures on glass articles.	Non-routine manual physical

7321	Pre-press Technicians	(a) operating graphic cameras and other photographic equipment to reproduce camera-ready copy onto films, plates and digital output devices;	Routine cognitive
7321	Pre-press Technicians	(b) using computer applications to generate images, text, layouts and impositions for print and other visual media displays;	Routine cognitive
7321	Pre-press Technicians	(c) operating plate-making equipment to reproduce images from film to printing plates, digital output devices and presses;	Routine cognitive
7321	Pre-press Technicians	(d) 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;	Routine cognitive
7321	Pre-press Technicians	(e) carrying out digital and chemical proofing from digital systems, and negative and positive films;	Routine cognitive
7321	Pre-press Technicians	(f) evaluating printed proofs, checking and correcting them for quality;	Routine cognitive
7321	Pre-press Technicians	(g) preparing and exposing carbon tissue for laying on cylinders by transfer method, and developing images.	Non-routine analytical
7515	Food and Beverage Tasters and Graders	(a) inspecting, testing, tasting and smelling agricultural products, food and beverages at various stages of processing;	Routine cognitive

7515	Food and Beverage Tasters and Graders	(b) determining quality, acceptability to consumer tastes and approximate value of products, and grading them into appropriate classes;	Routine cognitive
7515	Food and Beverage Tasters and Graders	(c) discarding inferior products;	Routine cognitive
7515	Food and Beverage Tasters and Graders	(d) recording the grade and/or identification numbers on tags, receiving or sales sheets;	Routine cognitive
7515	Food and Beverage Tasters and Graders	(e) weighing and measuring products.	Routine cognitive
7516	Tobacco Preparers and Tobacco Products Makers	(a) grading cured tobacco leaves by type, quality and locality where grown;	Routine cognitive
7516	Tobacco Preparers and Tobacco Products Makers	(b) mixing tobacco leaves according to formula to obtain a blend of distinct flavour;	Non-routine manual physical
7516	Tobacco Preparers and Tobacco Products Makers	(c) tending vacuum containers which moisten tobacco for further processing;	Non-routine manual physical
7516	Tobacco Preparers and Tobacco Products Makers	(d) removing midribs and stalks from tobacco leaves and shredding tobacco;	Non-routine manual physical
7516	Tobacco Preparers and Tobacco Products Makers	(e) making cigars, cigarettes, snuff and other tobacco products by hand or with simple machines.	Non-routine manual physical

7521	Wood Treaters	(a) operating and tending kilns, treating tanks and other equipment to dry lumber, prepare and season wood and other wood products, and to impregnate wood products with preservatives;	Routine manual
7521	Wood Treaters	(b) monitoring equipment operation, gauges and panel lights in order to detect deviations from standards and to ensure that processes are operating according to specifications;	Routine manual
7521	Wood Treaters	(c) operating valves to admit treating solution into treatment vessels, maintain specified heat, vacuum and hydraulic pressure and levels of solution during each phase of the treatment cycle;	Routine manual
7521	Wood Treaters	(d) activating vacuum and hydraulic pressure pumps that remove air and steam from retorts and force treating solution into pores of wood to accelerate the treatment process;	Routine manual
7521	Wood Treaters	(e) assisting in maintaining processing equipment and machines as required;	Non-routine manual physical
7521	Wood Treaters	(f) cleaning, lubricating and adjusting equipment;	Non-routine manual physical
7521	Wood Treaters	(g) transporting materials and products to and from work areas manually or using carts, handtrucks or hoists;	Non-routine manual physical
7521	Wood Treaters	(h) completing and maintaining production reports.	Routine cognitive



7523	Woodworking Machine Tool Setters and Operators	(a) setting up, programming, operating and monitoring several types of woodworking machines for sawing, shaping, boring, drilling, planing, pressing, turning, sanding or carving to fabricate or repair wooden parts for furniture, fixtures and other wooden products;	Routine manual
7523	Woodworking Machine Tool Setters and Operators	(b) operating preset special-purpose woodworking machines to fabricate wooden products such as coat hangers, mop handles, clothespins and other products;	Routine manual
7523	Woodworking Machine Tool Setters and Operators	(c) selecting knives, saws, blades, cutter heads, cams, bits or belts according to work piece, machine functions and product specifications;	Routine cognitive
7523	Woodworking Machine Tool Setters and Operators	(d) installing and adjusting blades, cutter heads, boring-bits and sanding-belts, and using hand tools and rules;	Non-routine manual physical
7523	Woodworking Machine Tool Setters and Operators	(e) setting and adjusting various kinds of woodworking machines for operation by others;	Non-routine manual physical
7523	Woodworking Machine Tool Setters and Operators	(f) reading and interpreting specifications or following verbal instructions.	Routine cognitive
7534	Upholsterers and Related Workers	(a) discussing upholstery fabric, colour and style with customers and providing cost estimates for upholstering furniture or other items;	Non-routine interpersonal
7534	Upholsterers and Related Workers	(b) making upholstery patterns from sketches, customer descriptions or blueprints;	Non-routine analytical

7534	Upholsterers and Related Workers	(c) laying out, measuring and cutting upholstery materials following patterns, templates, sketches or design specifications;	Non-routine analytical
7534	Upholsterers and Related Workers	(d) installing, arranging and securing springs, padding and covering material to furniture frames;	Non-routine manual physical
7534	Upholsterers and Related Workers	(e) sewing upholstery materials by hand to seam cushions and joining sections of covering materials;	Non-routine manual physical
7534	Upholsterers and Related Workers	(f) sewing rips or tears in material, or creating tufting, using needle and thread;	Non-routine manual physical
7534	Upholsterers and Related Workers	(g) tacking, gluing or sewing ornamental trims, buckles, braids, buttons and other accessories to covers or frames on upholstered items;	Non-routine manual physical
7534	Upholsterers and Related Workers	(h) laying out, cutting, fabricating and installing upholstery in aircrafts, motor vehicles, railway cars, boats and ships;	Non-routine manual physical
7534	Upholsterers and Related Workers	(i) repairing raw hide coverings of artificial limbs;	Non-routine manual physical
7534	Upholsterers and Related Workers	(j) renovating antique furniture using a variety of tools including ripping chisels, magnetic hammers and long needles;	Non-routine manual physical
7534	Upholsterers and Related Workers	(k) collaborating with interior designers to decorate rooms and coordinate furnishing fabrics;	Non-routine interpersonal
7534	Upholsterers and Related Workers	(l) making quilts, cushions and mattresses.	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(a) sorting and grading pelts, hides and skins according to colour, shading, size and density;	Routine cognitive

7535	Pelt Dressers, Tanners and Fellmongers	(b) scraping particles of flesh, fat or protective tissue from skins or pelts to clean and soften them;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(c) removing hair from skin or hides soaked in lime water;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(d) preparing hides by curing them with salt;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(e) removing long, coarse hair from pelts and trimming underlying hair to even length;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(f) tanning and dressing pelts to improve lustre and beauty or to restore the natural appearance of pelts;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(g) preparing bark and myrobalan liquor for treating hides or skins;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(h) treating hides and skins in tanning solution to convert them into leather;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(i) tinting or dyeing furs to enhance natural shades of fur;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(j) removing wrinkles and setting grains on wet hides or skins;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(k) dressing and applying dyes and stains to leather;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(l) stretching and smoothing dressed pelts;	Non-routine manual physical
7535	Pelt Dressers, Tanners and Fellmongers	(m) seasoning leather by applying chemical solution or oil evenly onto the surface by hand brush and allowing it to dry in open air.	Non-routine manual physical
7541	Underwater Divers	(a) taking safety precautions, such as monitoring dive lengths and depths, and registering with authorities	Routine cognitive

		before diving expeditions begin;	
7541	Underwater Divers	(b) checking and maintaining diving equipment such as helmets, masks, air tanks, diving suits, harnesses and gauges;	Routine cognitive
7541	Underwater Divers	(c) descending into water with the aid of diver helpers, using scuba gear or diving suits;	Non-routine manual physical
7541	Underwater Divers	(d) working under water to lay and repair bridges, piers and harbour-wall foundations;	Non-routine manual physical
7541	Underwater Divers	(e) inspecting for suspected damage and making minor repairs to ships' hulls and underwater installations;	Routine cognitive
7541	Underwater Divers	(f) reporting on the condition of wrecked ships;	Non-routine interpersonal
7541	Underwater Divers	(g) removing underwater obstructions;	Non-routine manual physical
7541	Underwater Divers	(h) drilling holes for underwater blasting;	Non-routine manual physical
7541	Underwater Divers	(i) performing various underwater tasks connected with salvage work or recovering dead bodies;	Non-routine manual physical
7541	Underwater Divers	(j) gathering shellfish, sponges and other aquatic life forms;	Non-routine manual physical
7541	Underwater Divers	(j) communicating with workers on the surface while under water, using signal lines or telephones;	Non-routine interpersonal
7541	Underwater Divers	(k) obtaining information about diving tasks and environmental conditions.	Non-routine analytical
7542	Shotfirers and Blasters	(a) ensuring that workplace safety and explosives handling, storage and transport procedures and regulations are followed;	Routine cognitive

7542	Shotfirers and Blasters	(b) planning and giving instructions for the layout, depth and diameter of blast holes;	Non-routine analytical
7542	Shotfirers and Blasters	(c) checking depth and cleanliness of blast holes;	Routine cognitive
7542	Shotfirers and Blasters	(d) determining quantity and type of explosives to be used;	Non-routine analytical
7542	Shotfirers and Blasters	(e) loading explosives into blast holes;	Routine manual
7542	Shotfirers and Blasters	(f) assembling, or directing other workers to assemble, primer charges using detonators and explosive cartridges, and attaching electrical wires, fuses and detonating cords to primers;	Non-routine manual physical
7542	Shotfirers and Blasters	(g) connecting wires, fuses and detonator cords into series, testing electrical circuits and repairing malfunctions, and connecting series to blasting machines;	Non-routine manual physical
7542	Shotfirers and Blasters	(h) covering charges, filling blast holes with rock dust, sand and other materials, and tamping material to compact charges;	Non-routine manual physical
7542	Shotfirers and Blasters	(i) ensuring that all explosives are detonated, and reporting and attending to misfires;	Routine cognitive
7542	Shotfirers and Blasters	(j) declaring blast areas safe before and after detonation of explosives;	Routine cognitive
7542	Shotfirers and Blasters	(k) compiling and maintaining records about usage of explosives in compliance with laws and regulations.	Routine cognitive
7549	Craft and Related Workers Not Elsewhere Classified	(a) heating, moulding and pressing optical glass to make lens blanks;	Non-routine manual physical

7549	Craft and Related Workers Not Elsewhere Classified	(b) grinding and polishing lens blanks.	Non-routine manual physical
8112	Mineral and Stone Processing Plant Operators	(a) 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;	Routine manual
8112	Mineral and Stone Processing Plant Operators	(b) positioning blocks and slabs of stone onto machines for sawing, cutting and further working;	Routine manual
8112	Mineral and Stone Processing Plant Operators	(c) monitoring and maintaining the flow of unprocessed rocks, minerals and stones from conveyors into machines;	Routine cognitive
8112	Mineral and Stone Processing Plant Operators	(d) operating washing, separating, leaching, precipitating, filtering, extracting and combining equipment to remove waste material and recover minerals;	Routine manual
8112	Mineral and Stone Processing Plant Operators	(e) combining mineral ores with solvents to facilitate further processing;	Routine manual
8112	Mineral and Stone Processing Plant Operators	(f) separating metal and mineral concentrates from ore and alluvial deposits by thickening, flotation, gravity separation, filtration, or magnetic and electrostatic separation;	Routine manual
8112	Mineral and Stone Processing Plant Operators	(g) observing meters, gauges and control panels, adjusting valves and controls to ensure the safe and efficient operation of equipment, detecting malfunctions and assisting with plant and machinery maintenance and repair;	Routine cognitive

8112	Mineral and Stone Processing Plant Operators	(h) examining processed materials visually or with hands to ensure compliance with established standards and job specifications, and collecting samples for testing in laboratories;	Routine cognitive
8112	Mineral and Stone Processing Plant Operators	(i) recording information about processing completed during shifts, such as quantities, types and dimensions of materials produced;	Routine cognitive
8112	Mineral and Stone Processing Plant Operators	(j) sorting, stacking and moving processed minerals and stone for packaging, further processing or shipping.	Routine manual
8132	Photographic Products Machine Operators	(a) operating and monitoring equipment which makes photographic film and paper;	Routine manual
8132	Photographic Products Machine Operators	(b) operating, monitoring and testing photographic processing and printing equipment, and maintaining operational standards;	Routine manual
8132	Photographic Products Machine Operators	(c) preparing exposed film for different processing batches in dark rooms and dark chambers;	Routine manual
8132	Photographic Products Machine Operators	(d) inspecting images, films and prints, and adjusting settings on printmaking equipment to produce the required colour, brightness, contrast, number, size and type of prints;	Routine cognitive
8132	Photographic Products Machine Operators	(e) adjusting settings and running automatic developing equipment;	Non-routine analytical
8132	Photographic Products Machine Operators	(f) operating equipment to transfer film to videotape or other electronic media;	Routine manual

8132	Photographic Products Machine Operators	(g) performing photographic processing-related tasks;	Routine manual
8132	Photographic Products Machine Operators	(h) operating automatic equipment (in retail establishments) to develop colour negatives, prints and slides.	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(a) operating and monitoring machines for tearing woollen rags into fibre;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(b) operating and monitoring machines for cleaning and turning woollen yarn waste into fluffed wool;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(c) operating and monitoring machines which combine textile fibres into uniform blends;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(d) 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;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(e) operating draw frames (machines) having numbers of drawing sets, each set combining several slivers into one of nearly the same weight and thickness as any of the original slivers;	Routine manual



8151	Fibre Preparing, Spinning and Winding Machine Operators	(f) operating and monitoring machines which spin thread and yarn from roving, wind two or more threads onto a 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;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(g) operating and monitoring spinning frames that draw out and twist roving or sliver into yarn;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(h) operating and monitoring machines for drawing slivers received from drawing machines into loosely twisted strands;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(i) preparing sizing for use in stiffening and finishing cloth and yarn by mixing ingredients such as starch, tallow, resins and soaps with water and boiling mixture for specified times in steam;	Non-routine manual physical
8151	Fibre Preparing, Spinning and Winding Machine Operators	(j) treating textiles with chemicals to make them water resistant;	Routine manual
8151	Fibre Preparing, Spinning and Winding Machine Operators	(k) cleaning rollers and cylinders of carding machines to remove wool waste;	Non-routine manual physical
8151	Fibre Preparing, Spinning and Winding Machine Operators	(l) operating and resurfacing metal drawing rolls of various spinning, combing and lapping machines with new rubber or leather covers.	Routine manual

8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(a) starting and controlling machines and equipment to bleach, dye or otherwise process and finish fabric, yarn, thread and/or other textile goods;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(b) tending machines that shrink woven or knitted cloth to predetermined size or strengthen the weave by interlocking the fibres;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(c) tending a variety of automatic machines that comb and polish furs;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(d) operating and monitoring machines that treat silk to give it body and weight;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(e) operating and monitoring machines that impregnate textiles with chemicals to render them waterproof;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(f) dyeing articles to change or restore their colours;	Non-routine manual physical
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(g) operating and monitoring machines that stretch or impart lustre or other type of finish to textiles;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(h) tending and regulating equipment that fumigates and removes foreign matter from furs;	Routine manual

8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(i) operating machines that comb, dry and polish furs, and clean, sterilize and fluff feathers and blankets;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(j) keying in processing instructions to programme electronic equipment;	Routine cognitive
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(k) observing display screens, control panels, equipment and cloth entering or exiting processes to determine if equipment is operating correctly;	Routine manual
8154	Bleaching, Dyeing and Fabric Cleaning Machine Operators	(l) cleaning machine filters and lubricating equipment.	Non-routine manual physical
8155	Fur and Leather Preparing Machine Operators	(a) operating and monitoring machines which remove flesh and fat from hides or pelts to clean and soften them prior to processing;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(b) operating and monitoring machines which remove long coarse hair from fur pelts, trim hair to even length and dye, stretch and smooth dressed pelts;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(c) operating and monitoring machines to remove epidermis hair roots, pigment cells and lime salts from the grain side of skin;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(d) operating and monitoring machines to reduce thickness of hide or skin to uniform size;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(e) operating and monitoring machines to polish or roughen hides or skins to specified finishes;	Routine manual

8155	Fur and Leather Preparing Machine Operators	(f) operating and monitoring machines which separate residual wool from skins, or flesh and hair from hides;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(g) operating and monitoring machines in which hides are split edgeways to form two or more pieces or to give uniform thickness;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(h) operating and monitoring machines which treat hides and skins in solutions to convert them into leather;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(i) treating surfaces of leather with oil and operating glazing machines to give glossy finishes to leather;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(j) operating and monitoring machines which apply dyes and stains to leather;	Routine manual
8155	Fur and Leather Preparing Machine Operators	(k) maintaining and repairing vats and other machinery.	Non-routine manual physical
8156	Shoemaking and Related Machine Operators	(a) operating and monitoring machines which mark patterns and cut shoe parts;	Routine manual
8156	Shoemaking and Related Machine Operators	(b) operating and monitoring machines which sew shoe parts together, or edge, polish, or apply ornaments and perform finishing tasks;	Routine manual
8156	Shoemaking and Related Machine Operators	(c) operating and monitoring machines which produce luggage, handbags, belts and other accessories, as well as other items such as saddles, collars or harnesses.	Routine manual

8171	Pulp and Papermaking Plant Operators	(a) operating and monitoring screening and bleaching equipment, digesters, mixing tanks, washers and other pulp processing machinery and equipment to carry out one or more cellulose processing steps;	Routine manual
8171	Pulp and Papermaking Plant Operators	(b) operating and monitoring papermaking and finishing process machinery and equipment to dry, calender, laminate, coat, slit, trim, wind or carry out other papermaking and finishing process steps;	Routine manual
8171	Pulp and Papermaking Plant Operators	(c) controlling start-up and shut-down of machinery and equipment, and observing equipment and machinery panel indicators, gauges and other equipment to detect machinery and equipment malfunctions and ensure that process steps are carried out according to specifications;	Routine manual
8171	Pulp and Papermaking Plant Operators	(d) communicating with process control operators to make process adjustments and to start up or shut down machinery and equipment as required;	Non-routine interpersonal
8171	Pulp and Papermaking Plant Operators	(e) analysing instrument readings and production test samples and making adjustments to the production process and equipment as required;	Non-routine analytical
8171	Pulp and Papermaking Plant Operators	(f) mounting, positioning and threading paper rolls using a hoist;	Routine manual
8171	Pulp and Papermaking Plant Operators	(g) inspecting paper visually for wrinkles, holes, discoloration, streaks or other defects, and taking corrective action;	Routine cognitive

8171	Pulp and Papermaking Plant Operators	(h) completing and maintaining production reports.	Routine cognitive
8172	Wood Processing Plant Operators	(a) 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;	Routine manual
8172	Wood Processing Plant Operators	(b) operating and monitoring log in-feed and conveyor systems;	Routine manual
8172	Wood Processing Plant Operators	(c) operating and monitoring 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 to saw or split shingles and shakes;	Routine manual
8172	Wood Processing Plant Operators	(d) operating and monitoring plywood core-laying machines and hot-plate plywood presses and machines which cut veneer;	Routine manual
8172	Wood Processing Plant Operators	(e) cleaning and lubricating sawmill equipment.	Non-routine manual physical
8181	Glass and Ceramics Plant Operators	(a) operating and monitoring glass-making furnaces to make glass by melting and fusing pre-mixed ingredients;	Routine manual
8181	Glass and Ceramics Plant Operators	(b) tending hot- or cold-end spray equipment used to coat glassware with surface hardener;	Routine manual

8181	Glass and Ceramics Plant Operators	(c) operating and maintaining machines that press or blow molten glass into moulds to form or shape containers such as bottles, jars and drinking glasses;	Routine manual
8181	Glass and Ceramics Plant Operators	(d) operating hand presses to mould glass into required shape;	Routine manual
8181	Glass and Ceramics Plant Operators	(e) operating drawing kilns to process molten glass into continuous sheets of flat glass;	Routine manual
8181	Glass and Ceramics Plant Operators	(f) operating and monitoring floating-glass production plants;	Routine manual
8181	Glass and Ceramics Plant Operators	(g) operating and maintaining finishing machines to grind, drill, sand, bevel, decorate, wash or polish glass or glass products;	Routine manual
8181	Glass and Ceramics Plant Operators	(h) setting and operating press machines to mould ceramic articles from moist clay;	Routine manual
8181	Glass and Ceramics Plant Operators	(i) operating machines to mix clay with water to knead it into a suitable plastic condition or semi-liquid form for making ceramic products;	Routine manual
8181	Glass and Ceramics Plant Operators	(j) operating and monitoring kilns which bake pottery, porcelain ware, bricks and tiles;	Routine manual
8181	Glass and Ceramics Plant Operators	(k) operating and monitoring machines for making glaze or abrasives;	Routine manual
8181	Glass and Ceramics Plant Operators	(l) operating and monitoring machines which extrude molten glass to form fibreglass filaments;	Routine manual
8181	Glass and Ceramics Plant Operators	(m) observing finished products to identify splits, cracks, breaks, colour and other imperfections.	Non-routine manual physical

8182	Steam Engine and Boiler Operators	(a) 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;	Non-routine manual physical
8182	Steam Engine and Boiler Operators	(b) analysing and recording instrument readings, troubleshooting and performing minor repairs to prevent equipment or system failure;	Non-routine analytical
8182	Steam Engine and Boiler Operators	(c) monitoring and inspecting performance of equipment for efficient operation and ensuring that boiler water, chemicals and fuel are maintained at required levels;	Routine cognitive
8182	Steam Engine and Boiler Operators	(d) firing coal furnaces by hand or with stokers and gas- or oil-fed boilers, using automatic gas feeds or oil pumps;	Routine manual
8182	Steam Engine and Boiler Operators	(e) testing boiler water quality or arranging for testing, adjusting and taking necessary corrective action, such as adding chemicals to prevent corrosion and harmful deposits;	Routine cognitive
8182	Steam Engine and Boiler Operators	(f) monitoring ship's engine, machinery and equipment indicators, recording variables and reporting abnormalities to the ship's engineer officer on watch;	Routine cognitive
8182	Steam Engine and Boiler Operators	(g) operating and maintaining off-loading liquid pumps and valves.	Routine manual
8311	Locomotive Engine Drivers	(a) driving or assisting in driving a steam, electric or diesel-electric locomotive engine;	Non-routine manual physical



8311	Locomotive Engine Drivers	(b) driving an underground or elevated passenger train;	Non-routine manual physical
8311	Locomotive Engine Drivers	(c) driving a locomotive to haul carriages underground or on the surface of a mine or quarry;	Non-routine manual physical
8311	Locomotive Engine Drivers	(d) watching for track hazards and observing signals and indicator gauges;	Routine cognitive
8311	Locomotive Engine Drivers	(e) operating communications systems to communicate with train crews and traffic controllers to ensure safe operation and scheduling of trains.	Routine manual
8312	Railway Brake, Signal and Switch Operators	(a) taking charge of and safeguarding freight train during runs;	Routine cognitive
8312	Railway Brake, Signal and Switch Operators	(b) controlling the flow of railway traffic over sections of line by operating signals and switches from control panels or signal boxes;	Routine manual
8312	Railway Brake, Signal and Switch Operators	(c) switching and coupling rolling stock in railway yards and sidings in accordance with orders about loading, unloading and make-up of trains;	Routine manual
8312	Railway Brake, Signal and Switch Operators	(d) making up trains for hauling by locomotive or cable and directing their movement along haulage ways in a mine or quarry;	Routine manual
8312	Railway Brake, Signal and Switch Operators	(e) checking train systems and equipment such as air-conditioning and heating systems, brakes and brake hoses prior to train run.	Routine cognitive
9411	Fast Food Preparers	(a) preparing simple or pre-prepared foods and beverages such as sandwiches, hamburgers, pizzas, fish and chips, salads and coffee;	Non-routine manual physical

9411	Fast Food Preparers	(b) washing, cutting, measuring and mixing foods for cooking;	Non-routine manual physical
9411	Fast Food Preparers	(c) operating large-volume single-process cooking equipment such as grills, deep-fat fryers or griddles;	Routine manual
9411	Fast Food Preparers	(d) re-heating pre-prepared food;	Non-routine manual physical
9411	Fast Food Preparers	(e) cleaning food preparation areas, cooking surfaces and utensils;	Non-routine manual physical
9411	Fast Food Preparers	(f) taking and serving food and beverage orders in eating places that specialize in fast service and carry-out food;	Non-routine manual physical
9411	Fast Food Preparers	(g) ordering and taking delivery of fast food ingredients;	Non-routine manual physical
9411	Fast Food Preparers	(h) maintaining sanitation, health and safety standards in work areas;	Non-routine manual physical
9411	Fast Food Preparers	(i) verifying that prepared food meets requirements for quality and quantity.	Routine cognitive
3111	Chemical and Physical Science Technicians	(a) collecting samples and preparing materials and equipment for experiments, tests and analyses;	Non-routine manual physical
3111	Chemical and Physical Science Technicians	(b) 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;	Non-routine analytical
3111	Chemical and Physical Science Technicians	(c) 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;	Routine cognitive

3111	Chemical and Physical Science Technicians	(d) setting up, operating, and maintaining laboratory instruments and equipment, monitoring experiments, making observations, and calculating and recording results;	Routine manual
3111	Chemical and Physical Science Technicians	(e) preparing materials for experimentation such as freezing and slicing specimens and mixing chemicals;	Non-routine manual physical
3111	Chemical and Physical Science Technicians	(f) collecting and testing earth and water samples, recording observations and analysing data in support of geologists or geophysicists.	Non-routine analytical