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PROPOSED LINKAGE OF OCCUPATION AND MAJOR FIELD OF STUDY FOR SLID

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EXECUTIVE SUMMARY

The Survey of Labour and Income Dynamics (SLID) includes information on respondents' current occupations and the fields of study in which they have obtained any postsecondary qualifications. To explain other characteristics measured in SLID, such as wages, supervisory roles, and job stability, it would be useful to know whether a person is working in a job related to his or her postsecondary education.

A variable has been proposed on an experimental basis to show whether the person's job is related to their postsecondary education. The variable is supported by a linkage table between intermediate-level categories of the 1991 Census Major Field of Study classification and the 1980 Standard Occupational Classification (SOC).

The table was constructed in-house by SLID. Feedback on the usefulness of this experimental variable or the linkage table would be welcome.

It should be noted that the Census of Population has examined the feasibility of constructing this concordance table but concluded that even a concordance table using the most detailed codes would have many quality problems. Despite this, SLID has proceeded since the objective of the variable would not be to provide estimates of the number of persons working in a field related to their education, but to help analysts explain other phenomena; for example, to what extent does the relationship between occupation and education explain a difference in earnings? In other words, the proposed variable may have limited use on its own but would be useful if it has considerable analytical value in conjunction with other variables.

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1. INTRODUCTION

The Survey of Labour and Income Dynamics (SLID) includes information on respondents' current occupations and the fields of study in which they have obtained any postsecondary qualifications. To explain other characteristics measured in SLID, such as wages, supervisory roles, and job stability, it would be useful to know whether a person is working in a job related to his or her postsecondary education.

SLID does not currently ask respondents if they are working in an occupation related to their postsecondary education, although this could be considered if the demand warrants it. Some other surveys contain direct questions on the topic.

Alternatively, it may be possible to derive information on occupation-education relatedness from existing questions using a linkage table between occupation and field of study. The cost of doing this would be low, and it could be done during current processing without modifications to the SLID interviews. The main work lies in designing the linkage matrix or table, which can be reused each year.

This paper discusses the issues surrounding the establishment of a linkage table and proposes a specific table for SLID, based on the medium levels of detail of the 1980 Standard Occupational Classification (SOC) and the 1991 Census Major Field of Study (MFS) classification (Appendix 4).¹

It is hoped that the inclusion of the table will accelerate feedback from anyone who may be interested in seeing or using this kind of information in SLID. Feedback on both the general issues and specifics would be welcome. For example, can such a linkage table adequately reflect reality, and what modifications should we make to

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¹Standard Occupational Classification, 1980, Statistics Canada, Catalogue No. 12-565, 1981 and Major Fields of Study of Postsecondary Graduates, Statistics Canada, Catalogue No. 93-329, 1993. For details about each classification relevant to various sections of this paper, refer to Appendix 1, About the standard classifications.

the version we now have? Sections of the proposed table could be modified easily in response to external comments or reviews.

The next section briefly raises some topics for analysis using SLID data that would use the derived information on whether people's jobs and education are related. Following that, the alternative approaches of direct questioning and indirect linkage are outlined with reference to other surveys. Section 4 considers the particular features of the Survey of Labour and Income Dynamics which need to be considered: what are the minimal analytical requirements of such a variable in SLID and what existing information will be used to obtain it. Section 5 deals with the challenges of defining "related" and choosing an appropriate level of detail for the linkage table. Section 6 explains the presentation of the linkage matrix or table as it appears in the appendixes.

2. ANALYTICAL VALUE

A derived variable identifying whether a person's current occupation is related to their postsecondary education could be used to explain characteristics such as wages, job tenure or job stability, and managerial roles.

For example, how do wages of workers in occupations related to their education compare to those of workers without postsecondary credentials specific to their job? Does this explain any of the observed differences in wages between subgroups of the population, for example between men and women?

More and more people are working part-time. Part-time jobs are typically associated with lower qualification requirements, but is there evidence of a trend towards part-time schedules for career-related jobs as well?

Focusing on employment transitions, how significant is the wage difference when a person moves from a job that is not related to his or her education to one that is? How often do people accept a drop in pay when they switch to a job that is related to their education? And how often do people change jobs in the other direction?

3. THE TWO APPROACHES: EXPERIENCE OF OTHER SURVEYS

At the present time, no national survey or census in Canada has developed a framework for linking all occupations and fields of study for the purposes of determining work and education relatedness. However, two surveys which have posed the question directly to respondents are the National Graduates Survey and the General Social Survey Cycle 4 on Education and Work. The topic of the relationship between people's jobs and their education was central to both these surveys.

The approach of posing the question directly, although it involves higher survey costs and respondent burden, may be conceptually superior. First, a decision about whether a given occupation and a given field of study are related is not clear-cut in all cases (more on this below). Respondents themselves may be the best qualified to make this assessment since they understand more fully what their job is and what their program of study was designed to do. They are not restricted by having to classify their particular jobs or studies.

Direct questioning offers the flexibility to word the question in a particular way or use several questions to define relatedness. For example, in 1984 and 1988 the National Graduates Survey asked postsecondary graduates of 1982 and 1986 if their job was one for which their educational program was designed and if they

used any of the skills they acquired in their education program.² It also asked whether their study program was intended to prepare them for a specific job or career. The question of job and education relatedness is particularly relevant at the outset of a career. With higher management jobs, which are not usually held until later in life, the link to field of study may be more complex and tenuous.

In 1989 the General Social Survey Cycle 4 asked Canadians of all educational backgrounds, "How closely is your job related to your education?".³ Like the NGS, it included a question on job satisfaction. It also asked respondents whether they felt overqualified for their jobs.

See Appendix 2 for more details on these surveys.

In preparation for the 1991 Census of Population, the idea of relating educational fields and occupation in a concordance table was considered. Even for the Census, a linkage was not feasible pair by pair at the most detailed levels, since it involves examining over 240,000 different combinations. After examining sections of each classification, it was concluded that in approximately one-third of all cases it would be impossible to infer with certainty whether a given field of study and occupation are related, not related or semi-related. Since results of completing a linkage were expected to be unsatisfactory, a concordance of educational field and occupation was not applied to Census microdata.

²The Class of 86, Employment and Immigration Canada and Statistics Canada, 1992.

³Human Resource Challenges of Education, Computers and Retirement, Statistics Canada, General Social Survey Analysis Series No. 7, Catalogue No. 11-612, 1992.

4. RELEVANT FEATURES OF SLID

4.1 Analytical objectives

While the Census of Population specializes in obtaining cross-sectional data of the highest quality, SLID's strength lies in its wide variety of variables specific to labour, income and demographics in a longitudinal format. This gives it enormous potential for drawing connections between events or conditions and a wide range of possible determinants. In SLID, the goal of adding a derived variable on workeducation relatedness is not to know with the greatest accuracy what proportion of employed Canadians are working in an occupation related to their education, but to what extent this characteristic determines others such as employment stability and earnings. It may have limited use on its own but considerable analytical value in conjunction with other variables.

A variable on work-education relatedness could be tested using regression analysis, i.e. by seeing whether it is "statistically significant" when used as an explanatory variable for other characteristics. The strength of alternative linkage tables could likewise be tested.

4.2 Starting variables

When they first enter the sample, respondents are asked to report the occupation of up to 2 jobs held at that time. Thereafter, up to six jobs held during the previous year may be recorded. This information is coded at the four-digit level of detail in the 1980 Standard Occupational Classification (SOC), which has 502 categories. It is also rolled up using a number of different typologies, including the major groups (21 levels) and minor groups (79 levels).

Also when they first enter the sample, respondents are asked to report the field of study of their highest university degree, certificate or diploma and their most recent certificate or diploma from other types of postsecondary institutions, if they have such certificates. Thereafter, each year, the major field of study is collected for all postsecondary degrees, certificates or diplomas obtained during the previous year. This information is coded at the most detailed level of the 1991 Census Major Field of Study classification (480 categories). It is also rolled up to 110 field of study groups (minor groups) and further to 10 broad groups (major groups).

The assessment of the level of "relatedness" is done independently for every job a person holds. All of a person's certificates should be considered simultaneously to determine the relationship between education and a particular job, so that if any of the person's postsecondary education is in a field deemed to be related to the occupation, then the job is deemed to be in a field related to the person's education.

Due to the questions in the preliminary (first) interview, some exclusions will persist for individuals with more than one university degree or more than one non-university diploma at the time of the preliminary interview. For example, if a woman received both a bachelor's degree in engineering and a Masters of Business Administration and she states "engineer" as her occupation, the variable will consider only the combination MBA and engineer, which are unrelated in the table. Such cases are not likely to occur so frequently that the analytical results are distorted. However, they could cause greater concern where exact counts of the population are the objective.

5. DESIGNING THE LINKAGE TABLE

5.1 Determining "relatedness"

The establishment of a linkage matrix or table entails a decision about whether each occupation-education combination is related. Fortunately, the task is simplified by the fact that the majority of occupation/education combinations are clearly unrelated. Many combinations are also quite obviously related. However, there remain a significant number of grey areas. Even for people who know the occupation or educational program well, it may be difficult to define the dividing lines between "related", "not related", and any intermediate categories.

Nevertheless, this subjective assessment has been attempted for SLID.

Following the example of the GSS, NGS and those who considered a linkage for the Census, the "grey" areas between clearly related and clearly unrelated are called "somewhat related" in the proposed linkage table. In some cases this term has to be interpreted as "maybe related". Slightly different descriptions have been used by the General Social Survey and the National Survey of Graduates. The NGS uses "partly related" for all cases falling between "directly related" and "not related", and the GSS uses "somewhat related" in contrast with "closely related" and "not at all" related.

One particular type of "grey" area arises due to the use of classifications. In some cases, a category has some *sub*categories which are clearly related to all or part of a category in the other classification and others which are not. For example, occupations in Child care services are grouped with those in Police and para-legal technologies, which clearly do not have the same educational requirements (assuming a postsecondary certificate is required for either). These occupation and field of study categories are called "partially related" here (or alternatively "partial

match"). In a few cases, both "somewhat related" and "partially related" are used to describe the match. Obviously, the particular aggregations within a classification are to some extent arbitrary, and the degree of homogeneity in the groupings can vary. It may be possible, later, to further break down the table at the most detailed level for some partial matches if it seems that this would be a big improvement. One redeeming aspect of the compromise of partial matches rather than going to greater detail is that when a person's work and educational program fit a partial match, they quite likely match at the detailed level.

Another inherent restriction of classifications is that each occupation description must use a single title. Sometimes a single title does not adequately capture all the information necessary to determine whether it is related to a certain educational program. To continue the example used above, a manager of an engineering firm must be coded either among engineers or managers to fit the classification.

A common case of this is teachers who do not have postsecondary qualifications in education or teaching. This would apply to many university and college teachers. The solution applied here is to match university teaching and other postsecondary teaching with all fields of study.

Occupations as managers are a special case, where the link with any particular area of study will often be weak in practice; many managers may not have degrees in management, although they may have postsecondary credentials. This is one example of how it is impossible to categorize all occupations by area of study so they are instead ranked by another criterion, such as position in an occupational hierarchy. (Many other occupations in the classification are grouped by product or service group; however, they are less likely to require postsecondary degrees or diplomas.) The solution in the proposed linkage table is to not define the degree of relationship for occupations as managers or administrators (corresponding to three

minor group categories in the SOC under the major group heading of Managerial, administrative and related occupations).

Note that there may be some occupational categories with no match. (In practice, there are occupations where most jobs are held by people without postsecondary education at all.) Not all careers are dependent on postsecondary schooling, although they may require certain skills or on-the-job training instead. However, no attempt has been made to identify occupations not requiring postsecondary qualifications. The proposed linkage is based on subject matter areas and not the level of education required.

5.2 Optimal level of detail

Choosing the level of detail for a linkage table involves a trade-off between minimizing the time required to label all combinations of occupation and educational program as related/unrelated and maximizing our confidence in identifying appropriate matches. Linking categories at the most detailed level of both the SOC and the MFS would result in 240,960 different combinations (502 SOC codes and 480 MFS codes).

However, while preparing this table, it quickly became apparent that in practice, it was necessary to examine, at least briefly, the most detailed levels of both the MFS and the SOC. Although we developed a table at the medium level of detail of both classifications, to do so we often looked at the subcategories (the most detailed level) to determine whether a match is partial or complete. For some medium-level combinations it is not necessary to think long about matches at the finest level of detail: a quick examination is sufficient to reveal that there is no match. However, for others it is very important to go to the next level. Partial matches as well as related pairs are identified this way. If a match is still not obvious at the

most detailed level, a decision has to be made anyway. Usually, these combinations are identified as "somewhat related".

Additional detail does not always facilitate decisions about matches. For example, the broad category of medicine and health exists in both the SOC and the MFS. It is an obvious match at this level. However, at the detailed level, we can form all sorts of improbable combinations. For example, is an occupation as a veterinarian closely or even somewhat related to a study program in psychiatry? As a solution, in the proposed table all combinations under medicine and health are set as "related", assuming that the more unrelated combinations rarely arise in practise. The same logic makes the use of partial matches at the medium level more acceptable.

6. PRESENTATION OF THE LINKAGE TABLE

The linkage table is in Appendix 4, preceded by a summary table in Appendix 3. The summary table is intended to facilitate a review of the linkage, but it does not substitute for a review of the main table.

The linkage table and the summary table are each presented in two equivalent formats, "A" and "B". "A" is structured in the order of the major groups of the Standard Occupational Classification and "B" is in the order of the Major Fields of Study classification.

6.1 Summary table

The linkage is only valid at the intermediate level of each classification, as shown in the main table (see Section 6.2 below). However, the summary table in Appendix 3 is useful to show which major group combinations have any matches

at the medium level. For example, subcategories of the major occupational group "Religion" only match with subcategories of one MFS major group "Humanities and related". Subcategories of another occupational heading, "Natural sciences, engineering and mathematics" match with subcategories of seven different MFS major groups.

For every major group combination with any matches, the summary tables show how many pairs are "related", "partially related", "somewhat related" or both "somewhat and partially related". This last category means that some of the subcategories are somewhat related.

The existence of any related or somewhat related combinations (as shown by the summary tables) is an indicator of the strength of association between the two major groups they belong to. However, the exact number of each type of combination (related, partially related, and so on) is often arbitrary, since it depends on the arbitrary nature of classifications. For example, the SOC happens to have 3 teaching categories at the minor group level while the MFS has 8 teaching categories. Since all are related, this results in 24 matches. But if either classification broke down the categories differently, either conceptually or between the detailed and intermediate levels, the result could be quite different.

The exact number of each type of match is also a by-product of how this proposed table deals with "other" categories and teaching occupations. "Other" and "n.e.c." categories have two functions: they group together occupations that are too rare to be a stand-alone category and they are a "catchall" for occupational descriptions that are not sufficiently precise to allow coding to one of the other (more specific) categories. Since they are by definition non-specific, they are indicated here as partially or somewhat related with a wide range of categories. For example, Other

engineering/applied science technologies, n.e.c. is matched with virtually all categories in major groups 15 through 21, resulting in 31 partial matches.

Teaching occupations have been matched with all fields of study to cover cases of postsecondary teachers who do not have qualifications specifically in education but who are presumably teaching in an area for which they have postsecondary qualifications. This raises the proportion of related pairs.

Table 1 below shows a summary of the distribution of each type of match among 8,284 pairs in total (109 x 76). (Managerial occupation codes are not included.) The proportion of matches depends on the level, major or minor. The major group combinations, which were used only to structure the table, all include some non-matches except for one: the SOC major group Medicine and Health and the MFS major group Health. In total, 41% or 45 of 110 major combinations have any matches at that level of the linkage.

Table 1: Types of matches between occupations and fields of study in the linkage table

	Related	Partial match	Somewhat related	Partial & somewhat related	Total, any match	No match	TOTAL PAIRS
Total	342	87	99	68	596	7688	8284
Total excluding teaching	220	87	98	68	473	7484	7957
Major combinations with any matches at the medium level	22	12	17	7	45*	65	110

^{*}Total does not add because some major combinations have more than one type of match.

However, the proportion drops dramatically among the minor group combinations, where only 7% or 596 of 8284 combinations are matches, and the rest are complete non-matches. (When teaching occupations are excluded, the proportion of matching combinations becomes 473 out of 7957, or not quite 6%.) If the

linkage were done at the finest level of detail, the proportion of matches would certainly be lower.

6.2 The linkage table

The linkage table (presented in Appendix 4) is also organized by major group headings ("A" by SOC and "B" by MFS), but it shows the actual matches at the minor group level. Below is an example, taken from Appendix 4, of the presentation for one major group combination:

01 001-009 001-046 Educational, recreational and counselling services	05 015-017 2711-2799 Teaching					
Re	Related					
001 Education-General 002 Elementary-Primary education 003 Secondary education (basic) 004 Secondary education (specialized) 005 Special education 006 Non-teaching educational fields 007 Physical education, health and recreation 009 Other education	015 University teaching 016 Elementary and secondary school teaching 017 Other teaching					
008 Counselling services and personal development	015 University teaching 017 Other teaching					
Somewi	nat related					
008 Counselling services and personal development	016 Elementary and secondary school teaching					

The shaded cells show all information on the major categories: the first code in each column is the major group code used by SLID, the centre code range covers the minor group categories under that major heading, using the coding system produced for the linkage exercise, and the next range shows the same codes at the finest level of detail, using the original coding system from the relevant classification.

Below that, the heading "Related" refers to all two-column combinations appearing below until the next heading, which is "Somewhat related". Eight educational programs are related to three teaching occupational groups, resulting in 24 "related" matches. There are two other related matches, between Counselling services and personal development and University teaching and Other teaching. There is one "somewhat related" match, between Counselling and Elementary and secondary school teaching. There are no partial matches in this example.

Notes specific to each match have been added throughout the tables, particularly to explain partial matches. Some titles have been shortened by excluding terms such as: "and related fields", "occupations in", and so on. For exact titles of all headings, refer to the published classifications.

References

Employment and Immigration Canada and Statistics Canada. *The Class of 86*. 1992.

Statistics Canada. *Human Resource Challenges of Education, Computers and Retirement*. General Social Survey Analysis Series No. 7, Catalogue No. 11-612, 1992.

Statistics Canada. *Major Fields of Study of Postsecondary Graduates*. Catalogue No. 93-329, 1993.

Statistics Canada. *Standard Occupational Classification*, 1980. Catalogue No. 12-565, 1981.

APPENDIX 1

ABOUT THE STANDARD CLASSIFICATIONS

Detailed and comprehensive standard classifications for both occupations and postsecondary education programs exist on which to base a linkage table or matrix between the two variables.

The 1980 Standard Occupational Classification (Catalogue No. 12-565) contains approximately 500 different groupings at the most detailed, four-digit unit group level. It also has aggregations at the three-digit minor group level and two-digit major group level. They are referred to in this paper as "major" (or broad) and "minor" (or medium) levels of detail respectively.

The basic principle of classification in the SOC is that of "kind of work performed". Occupations are therefore identified and grouped primarily in terms of the work usually performed, this being determined by the tasks, duties, and responsibilities of the occupation. Factors such as the materials processed or used, the equipment used, the degree of responsibility and complexity of work, the products made and services provided, have been taken as indicators of the work performed when combining jobs into occupations and occupations into groups.

Thus, within each group the occupations are almost unique and related to each other by similarity of kind of work performed. This approach to the grouping of occupations ensures a certain homogeneity within groups and permits a distinction between groups.

In its processing, SLID codes occupation descriptions at the unit group level, then derives the major and minor levels as well (which can be done directly using the unit group code). The proposed table presents certain major group categories

together, reducing them from 21 to 12 distinct categories in the summary tables. This has no effect on their treatment in the table since the medium level was used to establish related matches.

The Census publication *Major Fields of Study of Post-Secondary Graduates* (Catalogue No. 93-329), referred to in this paper as MFS, contains 480 fields of study at the most detailed level. The major field of study classification has been adapted from two educational classification systems utilized in Statistics Canada. The first is the University Student Information System (USIS) which, in turn is based upon the International Standard Classification of Education (ISCED). The second is the Community College Student Information System (CCSIS) which was especially constructed to classify students and graduates from college and trades institutions and programs.

The detailed list of "major field of study" codes are reproduced in SLID Research Paper No. 95-02, *SLID coding structure: Major field of study for postsecondary* graduates. The MFS also has major and minor group aggregations, listed in 95-02 with corresponding code ranges. The headings allow for straightforward recoding at the minor and major levels. At the broad level, the MFS has 10 educational categories. Similar to the treatment of occupational variables, SLID codes the major field of study to the most detailed level, then derives the major and minor group codes.

APPENDIX 2

QUESTIONS FROM THE GSS AND THE NGS ON THE RELATIONSHIP BETWEEN JOB AND EDUCATION

The General Social Survey

The fourth annual cycle of the General Social Survey, which collected data during January and February 1989, concentrated on work and education. The questions about the relationship between job and education were:

- 1) "How closely is your job related to your education?"
- 2) "What level of education is normally required for people who do your type of work?"
- 3) "Considering your experience, education and training, do you feel that you are overqualified for your job?"

These questions applied to the employed population 15 years of age and over in 1989. From the first question it was found that: "In the work force, 36% of the employed had jobs which were closely related to their education. For about one in five, their jobs were somewhat related to their education, while 43% reported no relationship in this regard."

The National Graduates Survey

In June 1984 and May 1988, this survey interviewed graduates of 1982 and 1986 respectively. Graduates were asked if:

1) their program was intended to prepare them for a specific job or career;

- 2) the job they had in June 1984 or May 1988 was one for which their educational program was designed; and
- 3) they used any of the skills they acquired in their education program in their current job.

From the combined responses to these questions, the current job was categorized as: direct, partial and no relationship to education. The percentage of full-time workers in jobs directly related to their education was 63% for 1986 graduates of both trade/vocational and career/technical programs. The percentage for 1986 university graduates was 48%.

APPENDIX 3: SUMMMARY TABLES

A: BY SOC GROUPS

Major group code and heading

Number and type of matches

	Re	elated	Partial	Somewhat	Partial & somewhat
SOC:	01 Managerial administrative and related All	No	ot define	ed (see see	ction 5.1)
SOC:	02 Natural sciences, engineering and mathematics				
MFS:	01 Educational, recreational and counselling services	-	1	-	-
	04 Social sciences and related	-	1	-	-
	06 Agricultural and biological sciences/technologies	-	-	-	10
	07 Engineering and applied sciences	24	-	2	-
	08 Engineering and applied science technologies and trade	es -	-	-	36
	09 Health professions, sciences and technologies	-	-	16	-
	10 Mathematics and physical sciences	11	-	22	-
SOC:	03 Social sciences and related fields				
MFS:	01 Educational, recreational and counselling services	1	2	-	-
	03 Humanities and related	1	-	-	-
	04 Social sciences and related	4	4	4	7
	09 Health professions, sciences and technologies	-	-	1	-
	10 Mathematics and physical sciences	-	-	2	-
	04 Religion				
MFS:	03 Humanities and related	1	-	-	-

SOC: 05 Teaching

MFS:	01 Educational, recreational and counselling services	26	-	1	-
	02 Fine and applied arts	14	-	-	-
	03 Humanities and related	20	-	-	-
	04 Social sciences and related	26	-	-	-
	05 Commerce, management and business administration	12	-	-	-
	06 Agricultural and biological sciences/technologies	22	-	-	-
	07 Engineering and applied sciences	28	-	-	-
	08 Engineering and applied science technologies and trades	24	-	-	-
	09 Health professions, sciences and technologies	32	-	-	-
	10 Mathematics and physical sciences	22	-	-	-
SOC:	06 Medicine and health				
MFS:	06 Agricultural and biological sciences/technologies	-	-	-	6
	09 Health professions, sciences and technologies	48	-	-	-
SOC:	07 Artistic, literary, recreational				
MFS:	02 Fine and applied arts	8	-	2	-
	03 Humanities and related	-	-	7	-
SOC:	08-10 Clerical; Sales; Service				
MFS:	02 Fine and applied arts	-	2	-	-
	03 Humanities and related	1	-	-	-
	04 Social sciences and related	-	1	-	-
	05 Commerce, management and business administration	-	7	3	6
	06 Agricultural and biological sciences/technologies	-	3	-	-
	07 Engineering and applied sciences	-	-	1	-
	08 Engineering and applied science technologies & trades	2	-	2	-

SOC:	11 Farming, horticultural and animal husbandry							
MFS:	06 Agricultural and biological sciences/technologies	6	-	12	-			
SOC:	12-13 Fishing, trapping; Forestry and logging							
MFS:	06 Agricultural and biological sciences/technologies	-	-	-	2			
	07 Engineering and applied sciences	-	-	1	-			
	08 Engineering and applied science technologies & trades	-	-	2	-			
SOC:	SOC: 14 Mining and quarrying including oil and gas field occupations							
MFS:	07 Engineering and applied sciences	-	-	1	-			
	08 Engineering and applied science technologies & trades	-	4	-	-			
SOC:	15-21 Processing;Other crafts and equipment operating	ıg						
MFS:	02 Fine and applied arts	-	1	-	-			
	03 Humanities and related	-	-	-	1			
	06 Agricultural and biological sciences/technologies	-	3	-	-			
	07 Engineering and applied sciences	-	-	20	-			
	08 Engineering and applied science technologies and trades	9	58	-	-			

B: BY MFS GROUPS

Major group code and heading

Number and type of matches

		Related	Partial	Somewhat	Partial & somewhat
MFS:	01 Educational, recreational and counselling service	es.			
SOC:	02 Natural sciences, engineering and mathematics	-	1	-	-
	03 Social sciences and related fields	1	2	-	-
	05 Teaching	26	-	1	-
MFS:	02 Fine and applied arts				
SOC:	05 Teaching	14	-	-	-
	07 Artistic, literary, recreational	8	-	2	-
	08-10 Clerical; Sales; Service	-	2	-	-
	15-21 Processing;Other crafts and equip. operating	-	1	-	-
MFS:	03 Humanities and related				
SOC:	03 Social sciences and related fields	1	-	-	-
	04 Religion	1	-	-	-
	05 Teaching	20	-	-	-
	07 Artistic, literary, recreational	-	-	7	-
	08-10 Clerical; Sales; Service	1	-	-	-
	15-21 Processing;Other crafts and equip. operating	-	-	-	1
MFS:	04 Social sciences and related				
SOC:	02 Natural sciences, engineering and mathematics	-	1	-	-
	03 Social sciences and related fields	4	4	4	7
	05 Teaching	26	-	-	-
	08-10 Clerical; Sales; Service	-	1	-	-

MFS:	05 Commerce, management and business administration	n					
SOC:	05 Teaching	12	-	-	-		
	08-10 Clerical; Sales; Service	-	7	3	6		
MFS:	06 Agricultural, biological sciences/technologies						
SOC:	02 Natural sciences, engineering and mathematics	-	-	-	10		
	05 Teaching	22	-	-	-		
	06 Medicine and health	-	-	-	6		
	08-10 Clerical; Sales; Service	-	3	-	-		
	11 Farming, horticultural and animal husbandry	6	-	12	-		
	12-13 Fishing, trapping; Forestry and logging	-	-	-	2		
	15-21 Processing;Other crafts and equip. operating	-	3	-	-		
MFS:	MFS: 07 Engineering and applied sciences						
SOC:	02 Natural sciences, engineering and mathematics	24	-	2	-		
	05 Teaching	28	-	-	-		
	08-10 Clerical; Sales; Service	-	-	1	-		
	12-13 Fishing, trapping; Forestry and logging	-	-	1	-		
	14 Mining and quarrying incl. oil & gas field occupations	-	-	1	-		
	15-21 Processing;Other crafts and equip. operating	-	-	20	-		
MFS:	08 Engineering and applied science technologies and tra	ades					
SOC:	02 Natural sciences, engineering and mathematics	-	-	-	36		
	05 Teaching	24	-	-	-		
	08-10 Clerical; Sales; Service	2	-	2	-		
	12-13 Fishing, trapping; Forestry and logging	-	-	2	-		
	14 Mining and quarrying incl. oil & gas field occupations	-	4	-	-		
	15-21 Processing;Other crafts and equip. operating	9	58	-	-		

MFS: 09 Health profession, sciences and technologies						
02 Natural sciences, engineering and mathematics	-	-	16	-		
03 Social sciences and related fields	-	-	1	-		
05 Teaching	32	-	-	-		
06 Medicine and health	48	-	-	-		
10 Mathematics and physical sciences						
02 Natural sciences, engineering and mathematics	11	-	22	-		
03 Social sciences and related fields	-	-	2	-		
05 Teaching	22	-	-	-		
	02 Natural sciences, engineering and mathematics 03 Social sciences and related fields 05 Teaching 06 Medicine and health 10 Mathematics and physical sciences 02 Natural sciences, engineering and mathematics 03 Social sciences and related fields	02 Natural sciences, engineering and mathematics 03 Social sciences and related fields 05 Teaching 06 Medicine and health 10 Mathematics and physical sciences 02 Natural sciences, engineering and mathematics 11 03 Social sciences and related fields -	02 Natural sciences, engineering and mathematics 03 Social sciences and related fields 05 Teaching 32 - 06 Medicine and health 48	02 Natural sciences, engineering and mathematics 16 03 Social sciences and related fields 1 05 Teaching 32 06 Medicine and health 48 10 Mathematics and physical sciences 02 Natural sciences, engineering and mathematics 11 - 22 03 Social sciences and related fields 2		

MFS: ALL

SOC: 01 Not defined (see section 5.1)

APPENDIX 4: CORRESPONDENCE BETWEEN OCCUPATIONS AND FIELDS OF STUDY

Includes:

- A: By Standard Occupational Classification groups (SOC)
- B: By Major Field of Study groups (MFS)

1980 Standard Occupational Classification			1991 Ce	ensus Major Field of	f Study
Major group	Minor group	Unit group	Major group	Minor group	Unit group

01 001-003 1111-1179 Managerial, administrative and related	All
No relationship defined for (see sec	
02 004-008 2111-2189 Natural sciences, engineering and mathematics	01 001-009 001-046 Educational, recreational and counselling services
Partial	match
005 Life sciences	007 Physical education, health and recreation
02 004-008 2111-2189 Natural sciences, engineering and mathematics	04 027-039 125-187 Social sciences and related
Partial	match
004 Physical sciences	028 Archeology
02 004-008 2111-2189 Natural sciences, engineering and mathematics	06 046-056 221-266 Agricultural and biological sciences/technologies
Partial match and	somewhat related
005 Life sciences Notes: includes Agriculturalists and Biologists	046 Agricultural science 047 Agricultural technology 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 052 Botany 054 Veterinary medicine/science 055 Zoology 056 Other agricultural and biological sciences/technologies
	Notes: 053 Household science and related fields excluded

1980 Standard Occupational Classification			1991 Ce	ensus Major Field of	f Study
Major group	Minor group	Unit group	Major group	Minor group	Unit group

02 004-008 2111-2189 Natural sciences, engineering and mathematics	07 057-070 267-301 Engineering and applied sciences
Rela	ated
006 Architects, engineers and community planners 007 Other occup. in architecture and engineering	057 Architecture and architectural engineering 058 Aeronautical and aerospace engineering 059 Biological and chemical engineering 060 Civil engineering 061 Design/systems engineering 062 Electrical/electronic engineering 063 Industrial engineering 064 Mechanical engineering 065 Mining, metallurgical and petroleum engineering 066 Resources and environmental engineering 067 Engineering science 068 Engineering, n.e.c.
Somewh	at related
005 Life sciences	069 Forestry
007 Other occup. in architecture and engineering	070 Landscape architecture
02 004-008 2111-2189 Natural sciences, engineering and mathematics	08 071-082 302-369 Engineering and applied science technologies and trades
Partial match and	somewhat related
006 Architects, engineers and community planners 007 Other occup. In architecture and engineering 008 Occ. In mathematics, statistics, systems analysis	071 Architectural technology 072 Chemical technology 073 Building technologies 074 Data processing and computer science technologies 075 Electronic and electrical technologies 076 Environmental and conservation technologies 077 General and civil engineering technologies 078 Industrial engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technology 081 Transportation technologies 082 Other engineering/applied science technologies, n.e.c.

1980 Standard Occupational Classification			1991 Ce	ensus Major Field of	f Study
Major group	Minor group	Unit group	Major group	Minor group	Unit group

02 004-008 2111-2189 Natural sciences, engineering and mathematics	09 083-098 370-441 Health professions, sciences and technologies
Somewh	at related
005 Life sciences	083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.
02 004-008 2111-2189 Natural sciences, engineering and mathematics	10 099-109 442-480 Mathematics and physical sciences
Rela	ated
004 Physical sciences	101 Chemistry 102 Geology 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science
008 Mathematical statistics, systems analysis	099 Actuarial science 100 Applied mathematics 103 Mathematical statistics 104 Mathematics

1980 Standard Occupational Classification			1991 Ce	ensus Major Field of	f Study
Major group	Minor group	Unit group	Major group	Minor group	Unit group

Somewhat related		
005 Life sciences	101 Chemistry 102 Geology 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science	
006 Architects, engineers and community planners	100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science	
007 Other occ. In architecture and engineering	100 Applied mathematics 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 109 General science	
03 009-013 2311-2399 Social sciences and related fields	01 001-009 001-046 Educational, recreational and counselling services	
Rela	ated	
010 Social work	008 Counselling services and personal development	
Partial	match	
009 Social sciences 013 Other	008 Counselling services and personal development	
03 009-013 2311-2399 Social sciences	03 017-026 080-124 Humanities and related	
Reli	ated	
012 Library, museum and archival sciences	019 Library and records science	

1980 Standard Occupational Classification			1991 Ce	ensus Major Field of	f Study
Major group	Minor group	Unit group	Major group	Minor group	Unit group

03 009-013 2311-23 Social sciences	04 027-039 125-187 Social sciences and related
	Related
010 Social work	035 Psychology 036 Sociology 037 Social work and social services
011 Law and jurisprudence	032 Law and jurisprudence
Р	artial match
009 Social sciences Notes: includes Economists, Sociologists, anthropologists and related social scientists, an Psychologists	027 Anthropology 030 Economics 035 Psychology 036 Sociology
Son	ewhat related
010 Social work	039 Other social sciences
013 Other occupations in social sciences	034 Political science 037 Social work and social services 039 Other social sciences
Partial mat	ch; somewhat related
009 Social sciences Notes: includes Economists, Sociologists, anthropologists and related social scientists, an Psychologists	028 Archeology 029 Area studies 031 Geography d 033 Man/Environment studies 034 Political science 037 Social work and social services 039 Other social sciences
03 009-013 2311-23 Social sciences	09 083-098 370-441 Health professions, sciences and technologies
Son	ewhat related
010 Social work	093 Public health

1980 Standard Occupational Classification		1991 Census Major Field of Study			
Major group	Minor group	Unit group	Major group	Minor group	Unit group

03 Social sciences	009-013	2311-2399	10 099-109 44 Mathematics and physical sciences	42-480	
		Somewh	at related		
009 Social science	s		103 Mathematical statistics 104 Mathematics		
04 Religion	014	2511-2519	03 017-026 08 Humanities and related	30-124	
		Rela	ated		
014 Religion			025 Religious studies		
05 Teaching	015-017	2711-2799	01 001-009 00 Educational, recreational and counselling se	01-046 ervices	
		Rela	ated		
015 University teaching 016 Elementary and secondary school teaching 017 Other teaching			001 Education-General 002 Elementary-Primary education 003 Secondary education (basic) 004 Secondary education (specialized) 005 Special education 006 Non-teaching educational fields 007 Physical education, health and recreation 009 Other education		
015 University teaching 017 Other teaching			008 Counselling services and personal development		
Somewh			at related		
016 Elementary and secondary school teaching			008 Counselling services and personal development		
05 Teaching	015-017	2711-2799	02 010-016 04 Fine and applied arts	47-079	
Rel			ated		
015 University teaching 017 Other teaching Notes: includes Fine arts teachers, n.e.c., the only place Fine arts teachers appears.			010 Fine arts 011 Music 012 Other performing arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts 015 Creative and design arts 016 Other applied arts		

1980 Standa	1980 Standard Occupational Classification		1991 Census Major Field of Study		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

05	015-017	2711-2799	03 017-026 080-124
Teaching	010 011	2711 2700	Humanities and related
		Rela	ated
Rela 015 University teaching 017 Other teaching Notes: 017 includes Community college and vocational school teachers			017 Classics, classical and dead languages 018 History 019 Library and records science 020 Mass media studies 021 English language and literature 022 French language and literature 023 Other languages and literature 024 Philosophy 025 Religious studies 026 Other humanities and related fields
05 Teaching	015-017	2711-2799	04 027-039 125-187 Social sciences and related
		Rela	ated
015 University teaching 017 Other teaching Notes: 017 includes Community college and vocational school teachers			027 Anthropology 028 Archeology 029 Area studies (non-languages or literature) 030 Economics 031 Geography 032 Law and jurisprudence 033 Man/environment studies 034 Political science 035 Psychology 036 Sociology 037 Social work and social services 038 War and military studies 039 Other social sciences and related fields
05 Teaching	015-017	2711-2799	05 040-045 188-220 Commerce, management and business administration
Rela			ated
015 University teaching 017 Other teaching			040 Business and commerce 041 Financial management 042 Industrial management and administration 043 Institutional management and administration 044 Marketing, merchandising, retailing and sales 045 Secretarial science - General

1980 Standard Occupational Classification		1991 Census Major Field of Study			
Major group	Minor group	Unit group	Major group	Minor group	Unit group

05 Teaching	015-017	2711-2799	06 046-056 221-266 Agricultural and biological sciences/technologies		
		Rela	ated		
015 University teaching 017 Other teaching			046 Agricultural science 047 Agricultural technology 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 052 Botany 053 Household science 054 Veterinary medicine/science 055 Zoology 056 Other agricultural and biological sciences/technologies		
05 Teaching	015-017	2711-2799	07 057-070 267-301 Engineering and applied sciences		
Rela		Rela	ated		
015 University teaching 017 Other teaching			057 Architecture and architectural engineering 058 Aeronautical and aerospace engineering 059 Biological and chemical engineering 060 Civil engineering 061 Design/systems engineering 062 Electrical/electronic engineering 063 Industrial engineering 064 Mechanical engineering 065 Mining, metallurgical and petroleum engineering 066 Resources and environmental engineering 067 Engineering science 068 Engineering, n.e.c. 069 Forestry 070 Landscape architecture		

1980 Standard Occupational Classification		1991 Census Major Field of Study			
Major group	Minor group	Unit group	Major group	Minor group	Unit group

05 Teaching	015-017	2711-2799	08 071-082 302-369 Engineering and applied science technologies and trades		
		Rela	ated		
015 University teaching 017 Other teaching			071 Architectural technology 072 Chemical technology 073 Building technologies 074 Data processing and computer science technologies 075 Electronic and electrical technologies 076 Environmental and conservation technologies 077 General and civil engineering technologies 078 Industrial engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technology 081 Transportation technologies 082 Other engineering/applied science technologies, n.e.c.		
05 Teaching	015-017	2711-2799	09 083-098 370-441 Health professions, sciences and technologies		
		Rela	ated		
015 University teaching 017 Other teaching			083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.		

1980 Standard Occupational Classification		1991 Census Major Field of Study			
Major group	Minor group	Unit group	Major group	Minor group	Unit group

Related 015 University teaching 017 Other teaching 099 Actuarial science 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science 06 018-020 3111-3169 06 046-056 221-2 Medicine and health 018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists Related 099 Actuarial science 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Metallurgy and materials 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science 046-056 221-2 Agricultural and biological sciences/technologies 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science	05	015-017	2711-2799	10 099-109 442-480		
015 University teaching 017 Other teaching 018 University teaching 0199 Actuarial science 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science 06 018-020 3111-3169 06 046-056 221-2 Agricultural and biological sciences/technologies Partial match and somewhat related 018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists 046 Agricultural science 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science	Teaching			Mathematics and physical sciences		
017 Other teaching 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science 06 018-020 3111-3169 06 046-056 221-2 Medicine and health Partial match and somewhat related 018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists 046 Agricultural science 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science			Rel	ated		
Medicine and health Partial match and somewhat related 018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists Agricultural and biological sciences/technologies 046 Agricultural science 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science	,			099 Actuarial science 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics		
018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists 046 Agricultural science 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science		0.00=0	3111-3169	06 046-056 221-266 Agricultural and biological sciences/technologies		
Notes: includes Veterinarians as well as Physicians and Dentists 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science	Partial match and			somewhat related		
	Notes: includes Veterinarians as well as			048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science Notes: 046 includes Animal science; 056 Other agricultural and biological science/technologies is		

1980 Standa	1980 Standard Occupational Classification		1991 Census Major Field of Study		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

06 018-020 3111-3169 Medicine and health	09 083-098 370-441 Health professions, sciences and technologies		
Rel	ated		
018 Health diagnosing and treating 019 Nursing, therapy and related assisting 020 Other occup. in medicine and health	083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.		
07 021-024 3311-3379 Artistic, literary, recreational	02 010-016 047-079 Fine and applied arts		
Rel	ated		
021 Fine and commercial art, photography and related fields	010 Fine arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts 015 Creative and design arts		
022 Performing and audio-visual arts	011 Music 012 Other performing arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts		
Somewh	hat related		
022 Performing and audio-visual arts	010 Fine arts		
021 Fine and commercial art, photography and related fields	012 Other performing arts		

1980 Standard Occupational Classification		1991 Ce	ensus Major Field of	f Study	
Major group	Minor group	Unit group	Major group	Minor group	Unit group

07 021-024 Artistic, literary, recreational	3311-3379	03 017-026 Humanities and related	080-124	
	Somewh	at related		
021 Fine and commercial art, photog 022 Performing and audio-visual arts		020 Mass media studies		
023 Writing		021 English language and literature 022 French language and literature 023 Other languages and literature 024 Philosophy 026 Other humanities and related fields		
08-10 025-040 Clerical Sales Service	4110-6199	02 010-016 Fine and applied arts	047-079	
	Partial	match		
038 Personal service occupations 039 Apparel and furnishings service Notes: 038 includes Barbers, hairdre 039 includes Apparel and furnishings	essers and	O16 Other applied arts Notes: includes Barbering, Beauty culture and cosmetology, Hairdressing, Upholstery and furniture and Applied artsrepair and renovation		
occupations	3 001 1100	ramitare and Applied and Tepair and Tenevation		
08-10 025-040 Clerical Sales Service	4110-6199	03 017-026 Humanities and related	080-124	
	Rel	ated		
029 Library, file and correspondence	clerks	019 Library and records science		
08-10 025-040 Clerical Sales Service	4110-8199	04 027-039 Social sciences and related	125-187	
Partial		match		
035 Protective service occupations		037 Social work and social services Notes: includes Police and para-legal		
		technologies and Protection services		

1980 Standard Occupational Classification		1991 C	ensus Major Field of	f Study	
Major group	Minor group	Unit group	Major group	Minor group	Unit group

08-10 025-040 4110-6199 Clerical Sales Service	05 040-045 188-220 Commerce, management and business administration
Partial	match
027 Office machine and electronic data- processing equipment operators	045 Secretarial sciencegeneral fields
	Notes: includes Business machines operations and Word processing but also Office accounting/Book-keeping and Legal or Medical secretary, etc.
029 Library, file and correspondence clerks 030 Reception, information, mail and message distribution 031 Other clerical and related	045 Secretarial sciencegeneral fields
036 Food and beverage preparation 037 Lodging and other accommodation 038 Personal service	043 Institutional management and administration Notes: includes Health care and services
Notes: 038 includes Funeral directors and embalmers and Housekeepers	management, Hotel and food administration, Funeral directors and embalming, and Tourism and resort management
Somewh	at related
032 Sales occupations, commodities 033 Sales occupations, services 034 Other sales occupations	044 Marketing, merchandising, retailing and sales
Notes: These categories cover many jobs which most likely do not require a postsecondary degree, e.g. Sales clerks and salespersons, Service station attendants and Route drivers	
Partial match and	somewhat related
026 Book-keeping, account-recording	040 Business and commerce
Notes: includes Cashiers and tellers	041 Financial management 042 Industrial management and administration 043 Institutional management and administration 044 Marketing, merchandising, retailing and sales 045 Secretarial sciencegeneral fields
	Notes: 045 includes Word processing, which has a high frequency

1980 Standard Occupational Classification		1991 Ce	ensus Major Field of	f Study	
Major group	Minor group	Unit group	Major group	Minor group	Unit group

08-10 025-040 4110-6199 Clerical Sales Service	0 06 046-056 221-266 Agricultural and biological sciences/technologies	
Part	al match	
036 Food and beverage preparation 038 Personal service 039 Apparel and furnishings service Notes: 038 includes Housekeepers, servants	053 Household science and related fields Notes: includes Household and domestic science, Clothing and textiles, Food nutrition, etc., and Food services and preparation	
08-10 025-040 4110-6199 Clerical Sales Service	0 07 057-070 267-301 Engineering and applied sciences	
Somev	hat related	
027 Office machine and electronic data processing equipment operators	062 Electrical/electronic engineering	
08-10 025-040 4110-6199 Clerical Sales Service	08 071-082 302-369 Engineering and applied science technologies and trades	
R	elated	
027 Office machine and electronic data processing equipment	074 Data processing and computer science technologies 075 Electronic and electrical technologies	
Somev	hat related	
027 Office machine and electronic data processing equipment	079 Mechanical engineering technologies 082 Other engineering/applied science technologies	
11 041-042 7113-7199 Farming, horticultural and animal husbandry	Agricultural and biological sciences/technologies	
041 Farmers 042 Other farming, horticultural and animal husbandry	046 Agricultural science 047 Agricultural technology 048 Animal science technologies	

1980 Standard Occupational Classification		1991 Ce	ensus Major Field of	f Study	
Major group	Minor group	Unit group	Major group	Minor group	Unit group

Somewhat related		
041 Farmers 042 Other farming, horticultural and animal husbandry	049 Biochemistry 050 Biology 051 Biophysics 052 Botany 054 Veterinary medicine/science 055 Zoology Notes: 056 Other Agricultural and biological sciences/technologies is omitted because frequency was only high on Food processing technologies	
12-13 043-044 7311-7519 Fishing, trapping Forestry and logging	06 046-056 221-266 Agricultural and biological sciences/technologies	
Partial match and	somewhat related	
043 Fishing, trapping	056 Other agricultural and biological sciences/technologies	
	Notes: includes Hunting and trapping	
044 Forestry and logging	052 Botany	
Notes: includes Forestry conservation occupations		
12-13 043-044 7311-7519 Fishing, trapping Forestry and logging	07 057-070 267-301 Engineering and applied sciences	
Somewh	at related	
044 Forestry and logging	069 Forestry	
Notes: includes labouring	Notes: This is under sciences, not technologies and trades, so it is "somewhat" related rather than fully related	

1980 Standard Occupational Classification		1991 Census Major Field of Study			
Major group	Minor group	Unit group	Major group	Minor group	Unit group

12-13 043-044 7311-7519 Fishing, trapping Forestry and logging	08 071-082 302-369 Engineering and applied science technologies and trades
Somewh	at related
044 Forestry and logging	080 Primary industries/resource processing technology 082 Other engineering/applied science technologies, n.e.c.
14 045 7710-7719 Mining and quarrying incl. oil & gas field occup.	07 057-070 267-301 Engineering and applied sciences
Somewh	at related
045 Mining and quarrying including oil and gas field occupations	065 Mining, metallurgical and petroleum engineering
Notes: includes labouring	Notes: as for 069 Forestry, above
14 045 7710-7719 Mining and quarrying incl. oil & gas field occup.	08 071-082 302-369 Engineering and applied science technologies and trades
Partial	match
045 Mining and quarrying including oil and gas field occup.	077 General and civil engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technologies 082 Other engineering/applied science technologies, n.e.c.

1980 Standard Occupational Classification		1991 Ce	ensus Major Field of	f Study	
Major group	Minor group	Unit group	Major group	Minor group	Unit group

15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating	02 010-016 047-079 Fine and applied arts
Partial	l match I
063 Fabricating, assembling and repairing occupations: textile, fur and leather products	016 Other applied arts
occupations. textile, full and leather products	Notes: includes Upholstery and furniture and Applied artsrepair and renovation
15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating	03 017-026 080-124 Humanities and related
Partial match; s	omewhat related
079 Other crafts and equipment operating occup, n.e.c.	020 Mass media studies
Notes: includes Photographic processing	
15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating	06 046-056 221-266 Agricultural and biological sciences/technologies
Partial	match
050 Food, beverage and related processing 053 Textile processing 063 Fabricating, assembling and repairing: textile, fur and leather products	053 Household science Notes: includes Clothing and textiles, Food nutrition and Food services and preparation

1980 Standard Occupational Classification			1991 Census Major Field of Study		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating	07 057-070 267-301 Engineering and applied sciences
Somewh	at related
049 Chemicals, petroleum, rubber, plastic materials processing 064 Fabricating, assembling and repairing occ.: rubber, plastic products	059 Biological and chemical engineering
067 Excavating, grading, paving 069 Other construction trades	060 Civil engineering
061 Fabricating, assembling, installing and repairing: electrical, electronic equipment 068 Electrical power, lighting and wire communications equipment, erecting, installing and repairing 078 Electronic communications equipment operating	062 Electrical/electronic engineering
047 Metal processing 055 Metal machining 056 Metal shaping and forming, except machining	063 Industrial engineering
060 Fabricating and assembling occup.: metal products, n.e.c. 064 Fabricating, assembling and repairing occ.: rubber, plastic products 065 Mechanics and repairers, n.e.c. 070 Transport equipment operating 071 Railway transport operating 072 Water transport operating 074 Other transport equipment operating 077 Stationary engine and utilities equipment operating	064 Mechanical engineering
046 Mineral ore treating 049 Chemicals, petroleum, rubber, plastic materials processing	065 Mining, metallurgical and petroleum engineering

1980 Standard Occupational Classification			1991 Census Major Field of Study		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating	08 071-082 302-369 Engineering and applied science technologies and trades	
Rel	ated	
049 Chemical, petroleum, rubber, plastic materials processing	072 Chemical technology	
068 Electrical power, lighting and wire communications equipment erecting, installing and repairing	075 Electronic and electrical technologies	
069 Other construction trades	073 Building technologies	
070 Air transport operating 071 Railway transport operating 072 Water transport operating 073 Motor transport operating 074 Other transport operating	081 Transportation technologies	
078 Electronic communications equipment operating	075 Electronic and electrical technologies	
Partial	match	
046 Mineral ore treating Notes: includes Crushing and grinding, Mixing, separating, filtering, etc.	079 Mechanical engineering technologies 080 Primary industries/resource processing technology	
047 Metal processing	078 Industrial engineering technologies 080 Primary industries/resource processing technologies	
	Notes: 080 includes Mining and metal processing	
048 Clay, glass and stone processing, forming	080 Primary industries/resource processing technologies	

1980 Standard Occupational Classification			1991 Census Major Field of Study		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

051 Wood processing occup. except pulp and paper making 052 Pulp and paper making	080 Primary industries/resource processing technologies
053 Textile processing	078 Industrial engineering technologies
	Notes: includes Clothing/fabric, Pattern making, Power sewing
055 Metal machining 056 Metal shaping and forming, except machining	078 Industrial engineering technologies 080 Primary industries/resource processing technologies
	Notes: 078 includes Sheet metal; 080 includes Mining and metal processing
057 Wood machining 058 Clay, glass, stone materials machining	080 Primary industries/resource processing technologies
	Notes: includes Forest products technology
059 Other machining, n.e.c.	078 Industrial engineering technologies 080 Primary industries/resource processing technologies
060 Fabricating and assembling: metal products, n.e.c. 061 Fabricating, assembling, installing and repairing occup.: Electrical and electronic equipment	078 Industrial engineering technologies 079 Mechanical engineering technologies
062 Fabricating, assembling and repairing: wood products	073 Building technologies
063 Fabricating, assembling and repairing: textile, fur and leather 064 Fabricating, assembling and repairing: rubber, plastic	072 Chemical technology
065 Mechanics and repairers, n.e.c.	078 Industrial engineering technologies 079 Mechanical engineering technologies
077 Stationary engine and utilities equipment operating	079 Mechanical engineering technologies
067 Excavating, grading, paving	077 General and civil engineering technologies

067 Excavating, grading, paving 068 Electrical power, lighting and wire

communications equipment erecting, installing and repairing

066 Other product fabricating, assembling and

063 Fabricating, assembling and repairing: textile,

064 Fabricating, assembling and repairing:

065 Mechanics and repairers, n.e.c.

069 Other construction trades

070 Air transport operating

fur and leather products

rubber, plastic products

products

repairing

071 Railway transport operating

072 Water transport operating

073 Motor transport operating

074 Other transport equipment operating

077 Stationary engine and utilities equipment operating

078 Electronic communications equipment operating

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

01 001-009 001-046 Educational, recreational and counselling services	02 004-008 2111-2189 Natural sciences, engineering and mathematics
Partia	al match
007 Physical education, health and recreation	005 Life sciences
01 001-009 001-046 Educational, recreational and counselling services	03 009-013 2311-2399 Social sciences and related fields
Re	elated
008 Counselling services and personal development	010 Social work
Partia	al match
008 Counselling services and personal development	009 Social sciences 013 Other
01 001-009 001-046 Educational, recreational and counselling services	05 015-017 2711-2799 Teaching
Re	elated
001 Education-General 002 Elementary-Primary education 003 Secondary education (basic) 004 Secondary education (specialized) 005 Special education 006 Non-teaching educational fields 007 Physical education, health and recreation 009 Other education	015 University teaching 016 Elementary and secondary school teaching 017 Other teaching
008 Counselling services and personal development	015 University teaching 017 Other teaching
Somew	hat related
008 Counselling services and personal development	016 Elementary and secondary school teaching

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

02 010-016 0/ Fine and applied arts	47-079	05 015-017 2711-2799 Teaching		
	Re	lated		
010 Fine arts 011 Music 012 Other performing arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts 015 Creative and design arts 016 Other applied arts		015 University teaching 017 Other teaching Notes: 017 includes Community college and vocational school teachers and Fine arts teachers, n.e.c.		
02 010-016 0/ Fine and applied arts	47-079	07 021-024 3311-3379 Artistic, literary, recreational		
	Re	lated		
010 Fine arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts 015 Creative and design arts		021 Fine and commercial art, photography and related fields		
011 Music 012 Other performing arts 013 Commercial and promotional arts 014 Graphic and audio-visual arts		022 Performing and audio-visual arts		
	Somewh	nat related		
010 Fine arts		022 Performing and audio-visual arts		
012 Other performing arts		021 Fine and commercial art, photography and related fields		
02 010-016 0/ Fine and applied arts	47-079	08-10 025-040 4110-6199 Clerical Sales Service		
Partial match				
016 Other applied arts Notes: includes Barbering, Beauty culture and cosmetology, Hairdressing, Upholstery and furniture and Applied artsrepair and renovation		038 Personal service occupations 039 Apparel and furnishings service occupations Notes: 038 includes Barbers, hairdressers and 039 includes Apparel and furnishings service occupations		

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

02 010-016 Fine and applied arts	047-079	15-21 Processing Machining Product fabricating, a Construction trades Transport equipmen Material handling, n. Other crafts and equ	t operating e.c.	8110-9599 Pairing
	Partia	al match		
016 Other applied arts Notes: includes Upholstery and furniture a Applied artsrepair and renovation	063 Fabricating, ass occupations: textile,			
03 017-026 Humanities and related	080-124	03 Social sciences	009-013	2311-2399
	Re	lated		
019 Library and records science		012 Library, museun	n and archival scier	nces
03 017-026 Humanities and related	080-124	04 Religion	014	2511-2519
	Re	lated		
025 Religious studies		014 Religion		
03 017-026 Humanities and related	080-124	05 Teaching	015-017	2711-2799
	Re	lated		
017 Classics, classical and dead languages 018 History 019 Library and records science 020 Mass media studies 021 English language and literature 022 French language and literature 023 Other languages and literature 024 Philosophy 025 Religious studies 026 Other humanities and related fields		015 University teaching 017 Other teaching Notes: 017 includes vocational school tea	Community colleg	e and

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

03 017-026 Humanities and related	080-124	07 Artistic, literary, recre	021-024 eational	3311-3379
	Somewl	hat related		
020 Mass media studies		021 Fine and comm 022 Performing and		ohy
021 English language and literature 022 French language and literature 023 Other languages and literature 024 Philosophy 026 Other humanities and related fields		023 Writing		
03 017-026 Humanities and related	080-124	08-10 Clerical Sales Service	025-040	4110-6199
	Re	lated		
019 Library and records science		029 Library, file and	correspondence cl	erks
03 017-026 Humanities and related	080-124	15-21 Processing Machining Product fabricating, Construction trades Transport equipmen Material handling, n. Other crafts and equ	t operating e.c.	8110-9599 pairing
Par	tial match;	somewhat related		
020 Mass media studies		079 Other crafts and n.e.c. Notes: includes Pho		
04 027-039 Social sciences and related	125-187	02 Natural sciences, en	004-008	2111-2189
	Partia	al match		
028 Archeology		004 Physical science	es	

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

04 027-039 125-187 Social sciences and related	03 009-013 2311-2399 Social sciences
ī	Related
035 Psychology 036 Sociology 037 Social work and social services	010 Social work
032 Law and jurisprudence	011 Law and jurisprudence
Par	tial match
027 Anthropology 030 Economics 035 Psychology 036 Sociology	009 Social sciences Notes: includes Economists, Sociologists, anthropologists and related social scientists, and Psychologists
Some	what related
039 Other social sciences	010 Social work
034 Political science 037 Social work and social services 039 Other social sciences	013 Other occupations in social sciences
Partial match	; somewhat related
028 Archeology 029 Area studies 031 Geography 033 Man/Environment studies 034 Political science 037 Social work and social services 039 Other social sciences	009 Social sciences Notes: includes Economists, Sociologists, anthropologists and related social scientists, and Psychologists

1991 Census Major Field of Study			1980 Stand	dard Occupational Cla	ssification
Major group	Minor group	Unit group	Major group	Minor group	Unit group

04 027-039 Social sciences and related	125-187	05 Teaching	015-017	2711-2799
	Re	lated		
027 Anthropology 028 Archeology 029 Area studies (non-languages 030 Economics 031 Geography 032 Law and jurisprudence 033 Man/environment studies 034 Political science 035 Psychology 036 Sociology 037 Social work and social servic 038 War and military studies 039 Other social sciences and rel	es	015 University 017 Other teac Notes: 017 ind vocational school	hing cludes Community col	lege and
04 027-039 Social sciences and related	125-187	08-10 Clerical Sales Service	025-040	4110-8199
	Partia	al match		
037 Social work and social servic	es	035 Protective	service occupations	
Notes: includes Police and para-l technologies and Protection servi				
05 040-045 Commerce, management and bu administration	188-220 siness	05 Teaching	015-017	2711-2799
	Re	lated		
040 Business and commerce 041 Financial management 042 Industrial management and a 043 Institutional management and 044 Marketing, merchandising, re 045 Secretarial science - Genera	d administration tailing and sales	015 University 017 Other teac		

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

05 040-045 188-220 Commerce, management and business administration	08-10 025-040 4110-6199 Clerical Sales Service
Partia	al match
045 Secretarial sciencegeneral fields Notes: includes Business machines operations and Word processing but also Office accounting/Book-keeping and Legal or Medical secretary, etc.	027 Office machine and electronic data-processing equipment operators
045 Secretarial sciencegeneral fields	029 Library, file and correspondence clerks 030 Reception, information, mail and message distribution 031 Other clerical and related
043 Institutional management and administration Notes: includes Health care and services management, Hotel and food administration, Funeral directors and embalming, and Tourism and resort management	036 Food and beverage preparation 037 Lodging and other accommodation 038 Personal service Notes: 038 includes Funeral directors and embalmers and Housekeepers
Somewi	hat related
044 Marketing, merchandising, retailing and sales	032 Sales occupations, commodities 033 Sales occupations, services 034 Other sales occupations Notes: These categories cover many jobs which most likely do not require a post-secondary degree, e.g. Sales clerks and salespersons, Service station attendants and Route drivers
Partial match and	d somewhat related
040 Business and commerce 041 Financial management 042 Industrial management and administration 043 Institutional management and administration 044 Marketing, merchandising, retailing and sales 045 Secretarial sciencegeneral fields Notes: 045 includes Word processing, which has a high frequency	026 Book-keeping, account-recording Notes: includes Cashiers and tellers

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

06 046-056 221-266 Agricultural and biological sciences/technologies	02 004-008 2111-2189 Natural sciences, engineering and mathematics
Partial match and	d somewhat related
046 Agricultural science 047 Agricultural technology 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 052 Botany 054 Veterinary medicine/science 055 Zoology 056 Other agricultural and biological sciences/technologies Notes: 053 Household science and related fields excluded	005 Life sciences Notes: includes Agriculturalists and Biologists
06 046-056 221-266 Agricultural and biological sciences/technologies	05 015-017 2711-2799 Teaching
Re	elated
046 Agricultural science 047 Agricultural technology 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 052 Botany 053 Household science 054 Veterinary medicine/science 055 Zoology 056 Other agricultural and biological sciences/technologies	015 University teaching 017 Other teaching

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

06 046-056 221-266 Agricultural and biological sciences/technologies	06 018-020 3111-3169 Medicine and health
Partial match and	d somewhat related
046 Agricultural science 048 Animal science technologies 049 Biochemistry 050 Biology 051 Biophysics 054 Veterinary medicine/science Notes: 046 includes Animal science; 056 Other agricultural and biological science/technologies is excluded because the frequency is only high on Food processing technologies	018 Health diagnosing and treating occupations Notes: includes Veterinarians as well as Physicians and Dentists
06 046-056 221-266 Agricultural and biological sciences/technologies	08-10 025-040 4110-6199 Clerical Sales Service
Partia	al match
053 Household science and related fields Notes: includes Household and domestic science, Clothing and textiles, Food nutrition, etc., and Food services and preparation	036 Food and beverage preparation 038 Personal service 039 Apparel and furnishings service Notes: 038 includes Housekeepers, servants
06 046-056 221-266 Agricultural and biological sciences/technologies	11 041-042 7113-7199 Farming, horticultural and animal husbandry
046 Agricultural science 047 Agricultural technology 048 Animal science technologies	041 Farmers 042 Other farming, horticultural and animal husbandry

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

Somewhat related				
049 Biochemistry 050 Biology 051 Biophysics 052 Botany 054 Veterinary medicine/science 055 Zoology	041 Farmers 042 Other farming, horticultural and animal husbandry			
Notes: 056 Other Agricultural and biological sciences/technologies is omitted because frequency was only high on Food processing technologies				
06 046-056 221-266 Agricultural and biological sciences/technologies	12-13 043-044 7311-7519 Fishing, trapping Forestry and logging			
Partial match and	d somewhat related			
056 Other agricultural and biological sciences/technologies	043 Fishing, trapping			
Notes: includes Hunting and trapping				
052 Botany	044 Forestry and logging Notes: includes Forestry conservation occupations			
06 046-056 221-266 Agricultural and biological sciences/technologies	15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating			
Partia	al match			
053 Household science Notes: includes Clothing and textiles, Food nutrition and Food services and preparation	050 Food, beverage and related processing 053 Textile processing 063 Fabricating, assembling and repairing: textile, fur and leather products			

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

07 057-070 267-301 Engineering and applied sciences	02 004-008 2111-2189 Natural sciences, engineering and mathematics		
Re	elated		
057 Architecture and architectural engineering 058 Aeronautical and aerospace engineering 059 Biological and chemical engineering 060 Civil engineering 061 Design/systems engineering 062 Electrical/electronic engineering 063 Industrial engineering 064 Mechanical engineering 065 Mining, metallurgical and petroleum engineering 066 Resources and environmental engineering 067 Engineering science 068 Engineering, n.e.c.	006 Architects, engineers and community planners 007 Other occup. in architecture and engineering		
Somewi	hat related		
069 Forestry	005 Life sciences		
070 Landscape architecture	007 Other occup. in architecture and engineering		
07 057-070 267-301 Engineering and applied sciences	05 015-017 2711-2799 Teaching		
Re	elated		
057 Architecture and architectural engineering 058 Aeronautical and aerospace engineering 059 Biological and chemical engineering 060 Civil engineering 061 Design/systems engineering 062 Electrical/electronic engineering 063 Industrial engineering 064 Mechanical engineering 065 Mining, metallurgical and petroleum engineering 066 Resources and environmental engineering 067 Engineering science 068 Engineering, n.e.c. 069 Forestry 070 Landscape architecture	015 University teaching 017 Other teaching		

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

07 057-070 267-301 Engineering and applied sciences	08-10 025-040 4110-6199 Clerical Sales Service		
Somewl	hat related		
062 Electrical/electronic engineering	027 Office machine and electronic data processing equipment operators		
07 057-070 267-301 Engineering and applied sciences	12-13 043-044 7311-7519 Fishing, trapping Forestry and logging		
Somewl	hat related		
069 Forestry	044 Forestry and logging		
Notes: This is under sciences, not technologies and trades, so it is "somewhat" related rather than fully related	Notes: includes labouring		
07 057-070 267-301 Engineering and applied sciences	14 045 7710-7719 Mining and quarrying incl. oil & gas field occup.		
Somewl	hat related		
065 Mining, metallurgical and petroleum engineering	045 Mining and quarrying including oil and gas field occupations		
Notes: as for 069 Forestry, above	Notes: includes labouring		
07 057-070 267-301 Engineering and applied sciences	15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating		
Somewi	hat related		
059 Biological and chemical engineering	049 Chemicals, petroleum, rubber, plastic materials processing 064 Fabricating, assembling and repairing occ.: rubber, plastic products		

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

060 Civil anginopring	067 Evenuating grading poving
060 Civil engineering	067 Excavating, grading, paving 069 Other construction trades
062 Electrical/electronic engineering	061 Fabricating, assembling, installing and repairing: electrical, electronic equipment 068 Electrical power, lighting and wire communications equipment, erecting, installing and repairing 078 Electronic communications equipment operating
063 Industrial engineering	047 Metal processing 055 Metal machining 056 Metal shaping and forming, except machining
064 Mechanical engineering	060 Fabricating and assembling occup.: metal products, n.e.c. 064 Fabricating, assembling and repairing occ.: rubber, plastic products 065 Mechanics and repairers, n.e.c. 070 Transport equipment operating 071 Railway transport operating 072 Water transport operating 074 Other transport equipment operating 077 Stationary engine and utilities equipment operating
065 Mining, metallurgical and petroleum engineering	046 Mineral ore treating 049 Chemicals, petroleum, rubber, plastic materials processing

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

08 071-082 302-369 Engineering and applied science technologies and trades	02 004-008 2111-2189 Natural sciences, engineering and mathematics
Partial match and	d somewhat related
071 Architectural technology 072 Chemical technology 073 Building technologies 074 Data processing and computer science technologies 075 Electronic and electrical technologies 076 Environmental and conservation technologies 077 General and civil engineering technologies 078 Industrial engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technology 081 Transportation technologies 082 Other engineering/applied science technologies, n.e.c.	006 Architects, engineers and community planners 007 Other occup. In architecture and engineering 008 Occ. In mathematics, statistics, systems analysis
08 071-082 302-369 Engineering and applied science technologies and trades	05 015-017 2711-2799 Teaching
Re	elated
071 Architectural technology 072 Chemical technology 073 Building technologies 074 Data processing and computer science technologies 075 Electronic and electrical technologies 076 Environmental and conservation technologies 077 General and civil engineering technologies 078 Industrial engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technology 081 Transportation technologies 082 Other engineering/applied science technologies, n.e.c.	015 University teaching 017 Other teaching

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

08 071-082 302-369 Engineering and applied science technologies and trades	08-10 025-040 4110-6199 Clerical Sales Service
Re	elated
074 Data processing and computer science technologies 075 Electronic and electrical technologies	027 Office machine and electronic data processing equipment
Somewi	hat related
079 Mechanical engineering technologies 082 Other engineering/applied science technologies	027 Office machine and electronic data processing equipment
08 071-082 302-369 Engineering and applied science technologies and trades	12-13 043-044 7311-7519 Fishing, trapping Forestry and logging
Somewi	hat related
080 Primary industries/resource processing technology 082 Other engineering/applied science technologies, n.e.c.	044 Forestry and logging
08 071-082 302-369 Engineering and applied science technologies and trades	14 045 7710-7719 Mining and quarrying incl. oil & gas field occup.
Partia	al match
077 General and civil engineering technologies 079 Mechanical engineering technologies 080 Primary industries/resource processing technologies 082 Other engineering/applied science technologies, n.e.c.	045 Mining and quarrying including oil and gas field occup.

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

08 071-082 302-369 Engineering and applied science technologies and trades	15-21 046-079 8110-9599 Processing Machining Product fabricating, assembling and repairing Construction trades Transport equipment operating Material handling, n.e.c. Other crafts and equipment operating		
Re	elated		
072 Chemical technology	049 Chemical, petroleum, rubber, plastic materials processing		
075 Electronic and electrical technologies	068 Electrical power, lighting and wire communications equipment erecting, installing and repairing		
073 Building technologies	069 Other construction trades		
081 Transportation technologies	070 Air transport operating 071 Railway transport operating 072 Water transport operating 073 Motor transport operating 074 Other transport operating		
075 Electronic and electrical technologies	078 Electronic communications equipment operating		
Partia	ial match		
079 Mechanical engineering technologies 080 Primary industries/resource processing technology	046 Mineral ore treating Notes: includes Crushing and grinding, Mixing, separating, filtering, etc.		
078 Industrial engineering technologies 080 Primary industries/resource processing technologies	047 Metal processing		
Notes: 080 includes Mining and metal processing			
080 Primary industries/resource processing technologies	048 Clay, glass and stone processing, forming		

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

080 Primary industries/resource processing technologies	051 Wood processing occup. except pulp and paper making 052 Pulp and paper making
078 Industrial engineering technologies	053 Textile processing
Notes: includes Clothing/fabric, Pattern making, Power sewing	
078 Industrial engineering technologies 080 Primary industries/resource processing technologies	055 Metal machining 056 Metal shaping and forming, except machining
Notes: 078 includes Sheet metal; 080 includes Mining and metal processing	
080 Primary industries/resource processing technologies	057 Wood machining 058 Clay, glass, stone materials machining
Notes: includes Forest products technology	
078 Industrial engineering technologies 080 Primary industries/resource processing technologies	059 Other machining, n.e.c.
078 Industrial engineering technologies 079 Mechanical engineering technologies	060 Fabricating and assembling: metal products, n.e.c. 061 Fabricating, assembling, installing and repairing occup.: Electrical and electronic equipment
073 Building technologies	062 Fabricating, assembling and repairing: wood products
072 Chemical technology	063 Fabricating, assembling and repairing: textile, fur and leather 064 Fabricating, assembling and repairing: rubber, plastic
078 Industrial engineering technologies 079 Mechanical engineering technologies	065 Mechanics and repairers, n.e.c.
077 General and civil engineering technologies	067 Excavating, grading, paving
079 Mechanical engineering technologies	077 Stationary engine and utilities equipment operating

1991 Census Major Field of Study		1980 Standard Occupational Classification		
Major group Minor group	Unit group	Major group Minor group	Unit group	
082 Other engineering/applied technologies, n.e.c. Notes: This received a high frematch with most occupations is may be better than no match.	equency, so a partial	046 Mineral oil treating 047 Metal processing 048 Clay, glass and stone processir 049 Chemicals, petroleum, rubber, processing 050 Food, beverage processing 051 Wood processing, except pulp a making 052 Pulp and paper making 053 Textile processing 054 Other processing 055 Metal machining 056 Metal shaping and forming, exc 057 Wood machining 058 Clay, glass, stone materials ma 059 Other machining, n.e.c. 060 Fabricating and assembling: me n.e.c. 061 Fabricating, assembling, installi repairing: electrical, electronic equip 062 Fabricating, assembling and rep products 063 Fabricating, assembling and rep fur and leather products 064 Fabricating, assembling and rep plastic products 065 Mechanics and repairers, n.e.c. 066 Other product fabricating, asser repairing 067 Excavating, grading, paving 068 Electrical power, lighting and wi communications equipment erecting repairing 069 Other construction trades 070 Air transport operating 071 Railway transport operating 072 Water transport operating 073 Motor transport operating 074 Other transport operating 075 Stationary engine and utilities er operating 078 Electronic communications equipment	ept machining ept machining chining etal products, ng and oment pairing: wood pairing: rubber, mbling and fre g, installing and erating quipment	

operating

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

09 083-098 370-441 Health professions, sciences and technologies	02 004-008 2111-2189 Natural sciences, engineering and mathematics
Somewh	nat related
083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.	002 Life sciences
09 083-098 370-441 Health professions, sciences and technologies	03 009-013 2311-2399 Social sciences
Somewh	nat related
093 Public health	010 Social work

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

09 083-098 370-441 Health professions, sciences and technologies	05 015-017 2711-2799 Teaching
Re	lated
083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.	015 University teaching 017 Other teaching
09 083-098 370-441 Health professions, sciences and technologies	06 018-020 3111-3169 Medicine and health
Re	lated
083 Dentistry 084 Medicine - general 085 Medicine - basic medical science 086 Medical specializations (non-surgical) 087 Paraclinical sciences 088 Surgery and surgical specializations 089 Nursing 090 Nursing assistance 091 Optometry 092 Pharmacy and pharmaceutical sciences 093 Public health 094 Rehabilitation medicine 095 Medical laboratory and diagnostic technology 096 Medical treatment technologies 097 Medical equipment and prosthetics 098 Other health professions, sciences and technologies, n.e.c.	018 Health diagnosing and treating 019 Nursing, therapy and related assisting 020 Other occup. in medicine and health

1991 Census Major Field of Study			1980 Standard Occupational Classification		
Major group	Minor group	Unit group	Major group	Minor group	Unit group

10 099-109 Mathematics and physical sciences	442-480	02 004-008 2111-2189 Natural sciences, engineering and mathematics				
Related						
101 Chemistry 102 Geology 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science		004 Physical sciences				
099 Actuarial science 100 Applied mathematics 103 Mathematical statistics 104 Mathematics		008 Mathematical statistics, systems analysis				
Somewhat related						
101 Chemistry 102 Geology 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science		005 Life sciences				
100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine sciences 108 Physics 109 General science		006 Architects, engineers and community planners				
100 Applied mathematics 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 109 General science		007 Other occ. In architecture and engineering				

1991 Census Major Field of Study Major group Minor group Unit group		1980 Standard Occupational Classification Major group Minor group Unit group				
10 099-109 Mathematics and physical sciences	442-480	03 Social sciences	009-013	2311-2399		
Somewhat related						
103 Mathematical statistics 104 Mathematics		009 Social sciences	;			
10 099-109 Mathematics and physical sciences	442-480	05 Teaching	015-017	2711-2799		
Related						
099 Actuarial science 100 Applied mathematics 101 Chemistry 102 Geology 103 Mathematical statistics 104 Mathematics 105 Metallurgy and materials 106 Meteorology 107 Oceanography and marine science 108 Physics 109 General science	es	015 University teach 017 Other teaching	ning			
All		01 Managerial, adminis	001-003 strative and related	1111-1179		
No relationship defined for managerial occupations (see section 5.1)						