1996 CENSUS OF CANADA

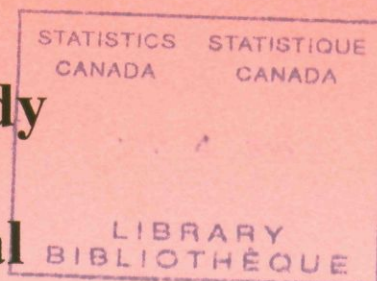**MFS-1**

Major Field of Study

Procedures Manual

Automated Coding

Statistics Canada · Statistique Canada

Canada

MFS-1

Major Field of Study

Procedures Manual

Prepared by: Census Operations Division
Social, Institutions and
Labour Statistics Field

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I. Introduction to the Major Field of Study Variable

The Major Field of Study (MFS) question was first introduced during the 1986 Census. It is found on the long (2B) questionnaire, along with five other questions concerning education. All levels of government have emphasized the need for data concerning the educational characteristics and attainment of Canadians. These data are needed to assess the effectiveness of the education system; examine relationships between education and employment, and occupation, industry and income; forecast occupational imbalances; and guide immigration policies.

The 1996 Major Field of Study question (Question 29) asks respondents what was their major field of study or training of their highest degree, certificate or diploma. Secondary or high school graduation certificates are excluded. One write-in box is provided. A check box follows the write-in box for those respondents whose highest qualification is a secondary school graduation certificate.

The 1996 Major Field of Study question is shown below. The instructions provided to assist respondents in answering Question 29 are shown on the next page.

---

29. What was the major field of study or training of this person's highest degree, certificate or diploma (excluding secondary or high school graduation certificates)?

For example, accounting, carpentry, civil, engineering, history, legal secretary, welding.

Major field of study or training

11

OR

12 ◯ This person's highest qualification is a secondary (high) school graduation certificate

---

The following instructions are found in the "Guide and Reasons Why the Questions Are Asked" which accompanies the census questionnaire:

> *For persons who earned more than one highest degree (for example, two bachelor's degrees or two master's degrees), report the field of study for the degree most recently earned.*

> *For persons who specialized in more than one field of study while earning their degrees, report the area in which the greatest number of credits or courses were earned.*

> *Wherever possible, report the subcategory of specialization within a broad area of training – especially for graduate studies or other advanced training.*

The introduction of new technologies is creating new jobs and changing the way we perform old ones. Information about the educational attainment of Canadians is more important than ever to evaluate our adjustment to these changes. The design of cost-effective programs for upgrading the skills of Canadians to facilitate their transition to new industries and new technologies requires detailed knowledge of present educational attributes and their geographic distribution.

Field of specialization data (Question 29) introduce a new dimension into labour market models and improve the analysis and forecasting of occupational distributions. This analysis is necessary to develop and implement appropriate immigration and labour policies and programs. It also enables policy makers to anticipate and respond to the economically-motivated migration of Canadians from one part of the country to another or outside Canada.

In particular, the development of high technology industries and the rate of technological change require more detailed information on qualifications than can be obtained from the other education questions alone (Questions 24, 25, 26, 27, and 28). The emergence of these new technologies and the decline of old ones creates a need for retraining people from one occupational category, or set of skills, in the use of another. Census data can assess the magnitude of the need for retraining and guide the delivery of such programs.

Questions 24 to 26, the first three education questions, serve to determine the level of schooling of the Canadian population. Question 27 identifies those respondents who are currently attending school either full or part time.

EDUCATION

24. What is the **highest** grade (or year) of secondary
• (high school) or **elementary** school this person
   ever attended?

   Enter highest number (1 to 13) of grades or years, excluding kindergarden.

37.

01 [   ] ◄ Number (1 to 13) of grades or years of secondary and/or elementary school

   OR

02 ◯ Never attended school or attended kindergarden only

---

25. How many years of education has this person
• completed at univesity?

03 ◯ None

04 ◯ Less than 1 year (of completed courses)

05 [   ] ◄ Number of completed years at university

---

26. How many years of schooling has this person
• ever completed at an institution other than
   a university, a secondary (high) school or
   an elementary school?

   Include years of schooling at community colleges, technical institutes, CEGEPs (general and professional), private trade schools or private business colleges, diploma schools of nursing, etc.

06 ◯ None

07 ◯ Less than 1 year (of completed courses)

08 [   ] ◄ Number of completed years at community colleges, trade schools, CEGEPs, etc.

---

27. In the past eight months (that is, since last September), was this person attending a school, college or university?

   Include attendance at elementary or secondary schools, business or trade schools, community colleges, technical institutes, CEGEPs etc., for courses which can be used as credits towards a certificate, diploma or degree.

   Mark one circle only.

09 ◯ No, did not attend in past eight months

10 ◯ Yes, full time

11 ◯ Yes, part time, day or night

These questions may be used in conjunction with Question 28 to determine a respondent's Major Field of Study if the response given to Question 29 is ambiguous.

You can find the education responses to Questions 24 to 28 on an additional screen, which is provided for each respondent (MFS screen).

28. What certificates, diplomas or degrees has this ▪ person ever obtained? *Include all qualifications obtained from secondary (high) schools, or trade schools and other postsecondary educational institutions.* *Mark as many circles as applicable.*	01 ◯ None→ Go to Question 30 02 ◯ Secondary (high) school graduation certificate or equivalent 03 ◯ Trades certificate or diploma 04 ◯ Other non-university certificate or diploma (obtained at community college, CEGEP, technical institute, etc.) 05 ◯ University certificate or diploma below bachelor level 06 ◯ Bachelor's degree(s) (e.g., B.A., B.Sc., LL.B.) 07 ◯ University certificate or diploma above bachelor level 08 ◯ Master's degree(s) (e.g., M.A., M.Sc., M.Ed.) 09 ◯ Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.V.M., O.D.) 10 ◯ Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)	01 ◯ None→ Go to Question 30 02 ◯ Secondary (high) school graduation certificate or equivalent 03 ◯ Trades certificate or diploma 04 ◯ Other non-university certificate or diploma (obtained at community college, CEGEP, technical institute, etc.) 05 ◯ University certificate or diploma below bachelor level 06 ◯ Bachelor's degree(s) (e.g., B.A., B.Sc., LL.B.) 07 ◯ University certificate or diploma above bachelor level 08 ◯ Master's degree(s) (e.g., M.A., M.Sc., M.Ed.) 09 ◯ Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.V.M., O.D.) 10 ◯ Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)

The Major Field of Study variable is hierarchical in nature. It contains ten major (general) categories which are divided into over one hundred minor categories (subgroups), which in turn are broken down into over 480 unit (detailed) groups. The major categories are as follows:

Code	Field of Study
001-046	Educational, recreational and counselling services
047-079	Fine and applied arts
080-124	Humanities and related fields
125-187	Social sciences and related fields
188-220	Commerce, management and business adminstration
221-266	Agricultural and biological sciences/technologies
302-369	Engineering and applied science technologies and trades
370-441	Health professions, sciences and technologies
442-480	Mathematics and physical sciences

There are five basic types of write-in responses which will not be coded by the Batch Coding System and will require manual resolution:

(1)   single responses;
(2)   misspelled responses;
(3)   abbreviated responses;
(4)   multiple responses; and
(5)   other categories of responses.

When assigning a code to the Major Field of Study variable, try to make the respondent's major field of study consistent with the response for university education, other postsecondary education, and diploma, certificate or degree.

-   For example, if a respondent has a bachelor's degree, four years of university and no years of other postsecondary education, assign a major field of study which is represented by courses offered by a university and not one offered by a trade school or college.

The occupation field can also be used to identify an appropriate major field of study.

-   For example, if the respondent is a family doctor, and the response is G.P. MED, then assign the code 375, General Practice Medicine.

Also, when assigning a code to the MFS variable, try to be as specific as possible. If the respondent specified a detailed field a study which is not listed in the Code Book, code under "other" if available and not under "general".

- For example, if the respondent answered "Sociology of Education" code 177- "Sociology - other".

Three possible actions can be taken when following the procedures to code a write-in response. You can assign a code, skip a write-in, or refer the case to the next level of coding. Coding the Major Field of Study variable is done with the help of the Automated Coding by Text Recognition (ACTR) system. ACTR is an automated computer system which uses a list of standard reference phrases and codes to match against write-in responses. If no direct match is found, ACTR will return a number of possible matches in an effort to help you resolve the case.

In this manual, a response is defined as exactly word by word what the respondent wrote on the questionnaire. A response can be made up of one or more fields which make up a multiple response. A field of study is each line in the MFS Code Book that has a code.

II. Standard Process Flow – Single Responses

Shown below is an example of how a response will appear on your screen.

Coding screen

```
                    1996 CENSUS OF POPULATION / AUTOMATED CODING        17/01/96
   MMANUAL1              INTERACTIVE CODING - MAJOR FIELD OF STUDY        14:33:43.9
   Write-in to be coded                                           Type   Code
    ANIMAL DOCTOR                                                       --------
   Phrases returned by ACTR                                      Codes    (S)elect
                                                                          -
                                                                          -   +
                                                                          -
   ID: 61001060 130 1    12
   ===============================================================================
   Data for same question from each household member              Persnr:   1
   Check-boxes and Write-ins


   Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
         HELP  UP    DOWN  <<<<  >>>>  MORE  +UP  +DOWN REFER VALID COMIT QUIT
```

The following Major Field of Study screen provides the respondent's answers to other questions which will assist you in resolving this case.

Appendix A lists all the abbreviations found in the Major Field of Study screen.

Major Field of Study screen

```
   NDISMFS          1996 CENSUS OF POPULATION / AUTOMATED CODING         17/01/96
   MMFS1                     MAJOR FIELD OF STUDY                        14:39:31.6
                                                        Number of years
      Secondary/Elementary education :                        13
               University education :                         6
      Other Post-secondary education : NONE
              School attendance      : NO
      Diploma,Certificate or Degree  : BACHDEG, MASTERS

                            Industry : 868 MEDICAL AND OTHER HEALTH LABORATORIES
                          Occupation : D014 VETERINARIAN

           Major field of study : ANIMAL DOCTOR
                                 :
      Relationship to person 1 : PERSON 1
                                 :
                     Birth date : 03/02/45        Sex : F
   ID: 61001058 100 0003
   Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
         HELP  UP    DOWN  <<<<  >>>>                                      QUIT
```

Standard Process Flow

The following process diagram summarizes the standard process flow expected to occur under normal processing conditions.

```
┌─────────────────────┐
│ Examine the response│
│    to be coded.     │
└─────────────────────┘
          │
          ▼
     ╱─────────╲
    ╱   Is the  ╲        No      ┌──────────────┐    No
   ╱   response  ╲────────────▶  │     Did      │──────────────┐
   ╲ represented by╱             │    ACTR      │              │
    ╲ more than one╱             │ return phrases?│            │
     ╲   word?   ╱               └──────────────┘              │
      ╲─────────╱                      │                       │
          │                            │ Yes                   │
       Yes│                            ▼                        │
          ▼                    ┌──────────────────┐             │
 ┌──────────────┐              │ Compare the phrase│            │
 │Go to Multiple│              │ with the response │            │
 │  Responses.  │              │to be coded, starting with│      │
 └──────────────┘              │  the first phrase │           │
                               │   to determine    │           │
                               │if it is suitable match.│      │
                               └──────────────────┘            │
                                        │                       │
                                        ▼                       ▼
                                   ╱─────────╲      No   ┌──────────────┐
                                  ╱  Was it a  ╲─────────▶│  Browse this │
                                  ╲ successful ╱          │ person's other│
                                   ╲  match?  ╱           │  education   │
                                    ╲───────╱             │    data.     │
                                        │                 └──────────────┘
                                     Yes│                        │
                                        ▼                        ▼
                            ┌──────────────────┐            ╱─────────╲   No
                            │   Select and     │           ╱ Was a code ╲────────┐
                            │ validate the code.│          ╲  found?   ╱         │
                            │Verify that the code│          ╲─────────╱          │
                            │description matches │               │               │
                            │  the response.    │            Yes│                │
                            │  Commit the code. │               ▼                │
                            └──────────────────┘      ┌──────────────────┐       │
                                                      │Study the relationship│   │
                                                      │between the results and the│   ┌──────────────┐
                                                      │ response of the MFS │──────▶│ REFER TO THE │
                                                      │    question.     │         │NEXT LEVEL OF │
                                                      └──────────────────┘         │   CODING.    │
                                                               │                   └──────────────┘
                                                               ▼
                                                      ┌──────────────┐
                                                      │Look up response│
                                                      │in MFS Code Book.│
                                                      └──────────────┘
                                                               │
                                                               ▼
                                                          ╱─────────╲    No
                                                         ╱ Was a valid ╲────────┐
                                                         ╲ code found? ╱        │
                                                          ╲─────────╱           │
                                                               │                │
                                                            Yes│                │
                                                               ▼                │
                                                      ┌──────────────┐          │
                                                      │Type, validate and│      │
                                                      │ commit the code. │      │
                                                      └──────────────┘          │
```

Single responses can be represented by more than one word, for example: "Civil Engineering", "Clinical Psychology", "Financial Management" and "International Economics".

For **any single response**, follow these instructions.

SITUATION	CONDITION	ACTION
Step 1 Examine the response to be coded.	(a) IF it is a single response THEN	go to Step 2.
	(b) IF the response is a multiple response, THEN	go to chapter V - Multiple Responses.
Step 2 Verify if there are any phrases returned by ACTR at the top of the screen.	(a) IF a phrase is returned by ACTR THEN	go to ACTR Process Table on page 10.
	(b) IF no phrase is returned by ACTR THEN	go to Auxiliary Process Table on page 11.

ACTR Process Table
(Automated Coding by Text Recognition)
When **ACTR** returns a phrase, follow these instructions.

SITUATION	CONDITION	ACTION
Compare the phrase with the response to be coded, starting with the first phrase, to determine if it is as suitable match.	(a) IF a match is found, THEN	(i) select the valid code; (ii) validate the code; (iii) verify that the code description at the bottom of the screen matches the response; and (iv) commit the code.
	(b) IF no match is found in the list ACTR has returned, THEN	go to the Auxiliary Information Process Table on page 11.

Auxiliary Information Process Table

SITUATION	CONDITION	ACTiON
Step 1 Browse through the responses provided by this person to the following questions: - secondary, elementary education; - university education; - other postsecondary education; - school attendance during the past eight months; - diploma; - industry; and - occupation.	(a) IF a code is found, THEN	(i) study the relationship between the results and the response to the Major Field of Study question; and (ii) look up response in MFS Code Book.
	(b) IF a valid code is found, THEN	(i) type the code; (ii) validate the code; and (iii) commit the code.
	(c) IF no other code can be found, THEN	**REFER TO NEXT LEVEL OF CODING.**

If you are in doubt about the correct code to assign, **REFER THE RESPONSE TO THE NEXT CODING LEVEL.**

III. Misspelled Responses

Shown below is an example of how a misspelled response will appear on your screen.

Coding screen

```
MMANUAL1          1996 CENSUS OF POPULATION / AUTOMATED CODING        17/01/96
                      INTERACTIVE CODING - MAJOR FIELD OF STUDY        14:33:43.9

 Write-in to be coded                                          Type    Code
 REGISTERD NURSE                                                       --------
 Phrases returned by ACTR                                      Codes    (S)elect
                                                                          -
                                                                          -  +
                                                                          -
  ID: 61001060 130 1      12
 ================================================================================
 Data for same question from each household member             Perenr:   1
 Check-boxes and Write-ins




 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       HELP   UP    DOWN  <<<<  >>>>  MORE   +UP   +DOWN REFER VALID COMIT QUIT
```

The following Major Field of Study screen provides the respondent's answers to other questions which will assist you in coding a response.

Major Field of Study screen

```
 NDISMFS           1996 CENSUS OF POPULATION / AUTOMATED CODING        17/01/96
 MMFS1                        MAJOR FIELD OF STUDY                     14:39:31.6

                                                      Number of years
     Secondary/Elementary education :                       12
              University education : 0
   Other Post-secondary education : 4
              School attendance : NO
   Diploma.Certificate or Degree : NUNIVCE


                        Industry : 861 HOSPITALS
                      Occupation : D112 NURSES, REGISTERED

      Major field of study : REGISTERD NURSE
                            :
   Relationship to person 1 :HUSBAND/WIFE
                            :
              Birth date   01/01/73        Sex : F

  ID: 61001058 100 0003
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       HELP   UP    DOWN  <<<<  >>>>                                     QUIT
```

For misspelled responses, consult the MFS Code Book to find the correct spelling and corresponding code.

You should be cautious in interpreting a misspelled major field of study. Certain write-ins will appear as misspellings but actually refer to totally different major fields of study with almost identical spellings. For example, the write-in "phycology" is not a misspelling of "psychology". Phycology is an authentic major field of study. It is the study of algae. You have to code this write-in as botany, code 247.

The following process diagram summarizes the process flow expected to occur when a misspelled response is being resolved.

```
┌─────────────────────┐
│ Examine the response │
│    to be coded.     │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│ Revise the spelling  │
│   using the MFS      │
│   Code Book.         │
└─────────────────────┘
          │
          ▼
      ◇ Are the ◇          No      ◇ Were any ◇         No     ┌─────────────────┐
      ◇ correct spelling ◇ ──────▶ ◇ phrases returned ◇ ─────▶ │ Go to Auxiliary  │
      ◇ and code ◇               ◇ by ACTR? ◇                  │ Information      │
      ◇ found? ◇                                                │ Process Table.   │
          │                           │                         └─────────────────┘
          │ Yes                       │ Yes
          ▼                           ▼
┌─────────────────────┐      ┌─────────────────────┐
│ Type, validate and   │      │   Go to ACTR         │
│ commit the code.     │      │   Process Flow.      │
└─────────────────────┘      └─────────────────────┘
```
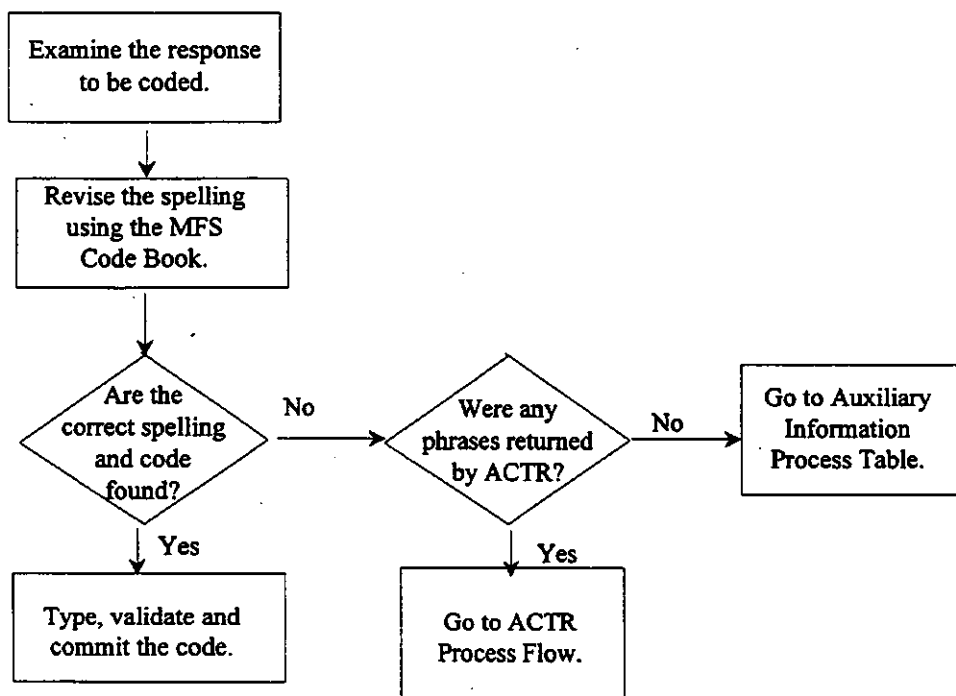
For **any misspelled response** to be coded, follow these instructions.

SITUATION	CONDITION	ACTION
Step 1 Examine the response to be coded. Review spelling in the MFS Code Book.	(a) IF the correct spelling and code are found, THEN	(i) type in the code; (ii) validate the code; and (iii) commit the code.
	(b) IF the correct spelling is not found, THEN	go to Step 2.
Step 2 Verify if there are any phrases returned by ACTR at the top of the screen.	(a) IF a phrase is returned by ACTR, THEN	go to the ACTR Process Table on page 10.
	(b) IF no phrase is returned by ACTR, THEN	go to Auxiliary Information Process Table on page 11.

IV. Abbreviated Responses

You should attempt to logically expand the abbreviation to its fullest form and then refer to the MFS Code Book for the appropriate code.

Shown below is an example of how an abbreviated response will appear on your screen.

Coding screen

```
                       1996 CENSUS OF POPULATION / AUTOMATED CODING          17/01/96
      MMANUAL1                INTERACTIVE CODING - MAJOR FIELD OF STUDY        14:33:43.9

      Write-in to be coded                                            Type  Code
      BUS ADM                                                         --------

      Phrases returned by ACTR                                        Codes      (S)elect
                                                                          -
                                                                          -  +
                                                                          -
      ID: 61001060 130 1      12
      ================================================================================
      Data for same question from each household member               Persnr:  1
      Check-boxes and Write-ins




      Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
            HELP  UP    DOWN  <<<<  >>>>  MORE  +UP   +DOWN REFER UALID COMIT QUIT
```

The following Major Field of Study screen provides the respondent's answers to other questions which will assist you in coding a response.

Major Field of Study screen

```
      NDISMFS           1996 CENSUS OF POPULATION / AUTOMATED CODING          17/01/96
      MMFS1                           MAJOR FIELD OF STUDY                    14:39:31.6
                                                                Number of years
            Secondary/Elementary education :                        13
                        University education : 9
            Other Post-secondary education : LT 1 YEAR
                       School attendance : NO
         Diploma,Certificate or Degree  : BACDEG. MASTERS


                          Industry   : 777 MANAGEMENT CONSULTING SERVICES
                          Occupation   A112 HUMAN RESOURCES MANAGERS

            Major field of study  - BUS ADM

         Relationship to person 1 : PERSON 1

                      Birth date  01/07/68        Sex : F

      ID: 61001058 100 0003
      Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
            HELP  UP    DOWN  <<<<  >>>>                                    QUIT
```

The following process diagram summarizes the process flow expected to occur when abbreviated responses are being resolved.

```
┌─────────────────────┐
│ Examine the response│
│    to be coded.     │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│ Expand the abbreviated│
│  write-in to it's fullest│
│        form.        │
└─────────────────────┘
           │
           ▼
      ╱────────╲                            ╱────────╲                    ┌─────────────────┐
     ╱ Were the ╲                          ╱ Were any ╲        No         │ Go to Auxiliary │
    ╱ unabbreviated╲        No            ╱  phrases   ╲──────────────────▶│   Information    │
    ╲ form of the write-in and╲──────────▶╲ returned by ╱                  │  Process Table.  │
     ╲code found in the MFS╱              ╲   ACTR?    ╱                   └─────────────────┘
      ╲ Code Book?╱                         ╲────────╱
        ╲──────╱                                │
           │ Yes                                │ Yes
           ▼                                    ▼
┌─────────────────────┐            ┌─────────────────────┐
│    Type, validate   │            │     Go to ACTR      │
│ and commit the code.│            │   Process Table.    │
└─────────────────────┘            └─────────────────────┘
```
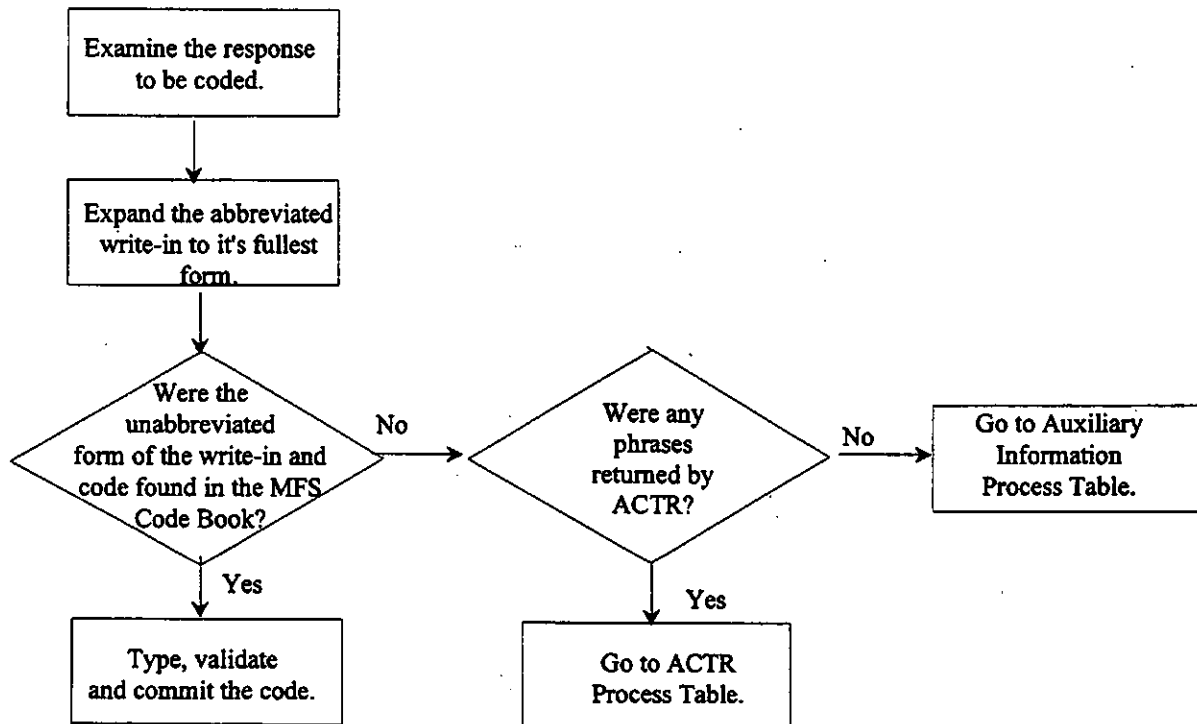
For **any abbreviated response** to be coded, follow these instructions.

SITUATION	CONDITION	ACTION
Step 1 Examine the response to be coded. Expand the abbreviated write-in to its fullest form.	(a) IF the unabbreviated form of the write-in, and the code, are found in the MFS Code Book, THEN	(i) type in the valid code; (ii) validate the code; and (iii) commit the code.
	(b) IF the correct spelling is not found, THEN	go to Step 2.
Step 2 Verify if there are any ACTR phrases at the top of the screen.	(a) IF a phrase is returned by ACTR, THEN	go to ACTR Process Table on page 10.
	(b) IF no phrase is returned by ACTR, THEN	go to Auxiliary Information Process Table on page 11.

V. Multiple Responses

Shown below is an example of how a multiple response will appear on your screen.

Coding screen

```
 ┌─────────────────────────────────────────────────────────────────────────┐
 │             1996 CENSUS OF POPULATION / AUTOMATED CODING        17/01/96  │
 │ MMANUAL1              INTERACTIVE CODING - MAJOR FIELD OF STUDY  14:33:43.9│
 │ Write-in to be coded                                         Type   Code  │
 │ BUSINESS AND COMPUTER SCIENCE                                ─────────     │
 │ Phrases returned by ACTR                                    Codes   (S)elect│
 │                                                               ─           │
 │                                                               ─   +       │
 │                                                               ─           │
 │ ID: 61001060 130 1    12                                                  │
 │ ==========================================================================│
 │ Data for same question from each household member          Persnr:  1     │
 │ Check-boxes and Write-ins                                                 │
 │                                                                           │
 │                                                                           │
 │                                                                           │
 │                                                                           │
 │ Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12───│
 │      HELP  UP   DOWN  <<<<  >>>>  MORE  +UP  +DOWN REFER VALID COMIT QUIT  │
 └─────────────────────────────────────────────────────────────────────────┘
```

The following Major Field of Study screen provides the respondent's answers to other questions which will assist you in coding a response.

Major Field of Study screen

```
 ┌─────────────────────────────────────────────────────────────────────────┐
 │ NDISMFS            1996 CENSUS OF POPULATION / AUTOMATED CODING  17/01/96  │
 │ MMFS1                          MAJOR FIELD OF STUDY             14:39:31.6 │
 │                                                    Number of years        │
 │   Secondary/Elementary education :                        11              │
 │             University education : 5                                      │
 │   Other Post-secondary education : 0                                      │
 │            School attendance : NO                                         │
 │   Diploma,Certificate or Degree : BACHDEG                                 │
 │                                                                           │
 │                        Industry : 1020 FISH PRODUCTS INDUSTRY             │
 │                      Occupation : 1135 FINANCIAL MANAGEMENT OCC.          │
 │                                                                           │
 │       Major field of study : BUSINESS AND COMPUTER SCIENCE                │
 │                            :                                              │
 │   Relationship to person 1 : SON/DAUGHTER                                 │
 │                            :                                              │
 │              Birth date  01/01/73        Sex : M                          │
 │ ID: 61001058 100 0003                                                     │
 │ Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12───│
 │      HELP  UP   DOWN  <<<<  >>>>                                  QUIT     │
 └─────────────────────────────────────────────────────────────────────────┘
```
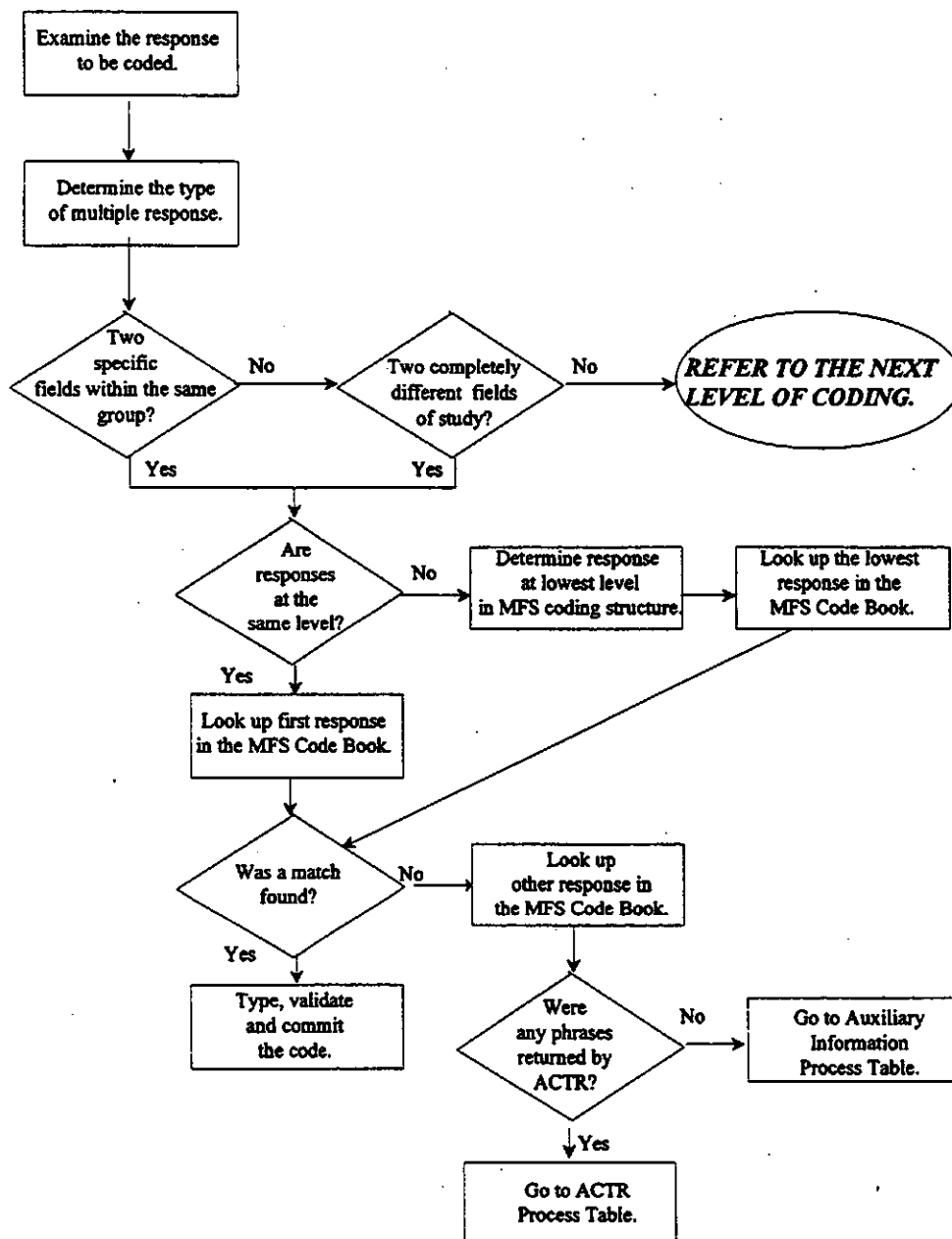
The following process diagram summarizes the process flow expected to occur when multiple responses are being resolved.

A multiple response represents two completely different major fields of study, for example: "History and Computer Science", "Law and Medicine", "Geography and English" and "Mathematics and Physics". You must determine with the help of the MFS Code Book if the write-in represents more than a single response.

For **any multiple response** to be coded, follow these instructions.

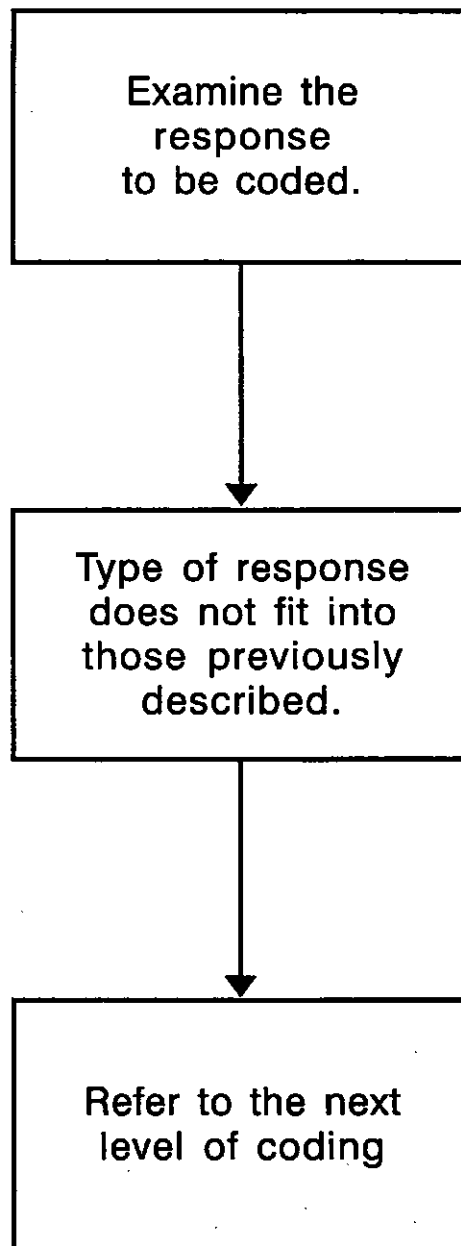| SITUATION	CONDITION	ACTION
Step 1 Examine the response to be coded. Determine the type of multiple response.	(a) IF the write-in represents two specific fields within the same group, THEN	go to Step 2.
	(b) IF the write-in represents two completely different fields of study, THEN	go to Step 2.
	(c) IF the write-in is not found in (a) or (b), THEN	**REFER TO NEXT LEVEL OF CODING.**
Step 2 Determine if the fields are at the same level.	(a) IF the fields are at the same level, THEN	(i) look up the first field in the MFS Code Book; (ii) go to Step 2(c).
	(b) IF the fields are not at the same level, THEN	(i) determine field at the lowest level of the MFS coding structure; (ii) look up this field in the MFS Code Book; (iii) go to Step 2(c).
	(c) IF a match is found, THEN	(i) type the code; (ii) validate the code; and (iii) commit the code.
	(d) IF a match is not found, THEN	(i) look up the field in the MFS Code Book; (ii) go to Step 3.
Step 3 Verify if there are any ACTR phrases at the top of the screen.	(a) IF a phrase is returned by ACTR, THEN	go to the ACTR Process table on page 10.
	(b) IF no phrase is returned by ACTR, THEN	go to the Auxiliary Information Process Table on page 11.

VI. Other Categories of Responses

Other categories of responses can be represented by any response which does not fit into those described previously in this manual. For example: "Same", ."Same as" or "See Person 1". In these cases, since you cannot browse the answers of the person being referred to, refer the write-in to the next coding level.

Shown below is an example of how an other category of response will appear on your screen.

Coding screen

```
-----------------------------------------------------------------------
              1996 CENSUS OF POPULATION / AUTOMATED CODING      17/01/96
MMANUAL1          INTERACTIVE CODING - MAJOR FIELD OF STUDY     14:33:43.9

Write-in to be coded                                        Type   Code
                                                            --------
 ZILCH
Phrases returned by ACTR                              Codes    (S)elect
                                                        -
                                                        -
                                                        -      +

 ID: 61001060 130 1     12
============================================================================
Data for same question from each household member           Perenr:   1
Check-boxes and Write-ins




Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      HELP  UP    DOWN  <<<<  >>>>  MORE  +UP   +DOWN REFER VALID COMIT QUIT
-----------------------------------------------------------------------
```

The following process diagram summarizes the process flow expected to occur when other categories of responses are being resolved.

```
+---------------------------+
|                           |
|       Examine the         |
|        response           |
|       to be coded.        |
|                           |
+---------------------------+
              |
              v
+---------------------------+
|                           |
|     Type of response      |
|      does not fit into     |
|     those previously      |
|       described.          |
|                           |
+---------------------------+
              |
              v
+---------------------------+
|                           |
|     Refer to the next     |
|      level of coding      |
|                           |
+---------------------------+
```

For any "other categories of write-in" responses to be coded, follow these instructions.

SITUATION	CONDITION	ACTION
Step 1 Examine the response to be coded.	IF the type of response is not a misspelled response, abbreviated response, or multiple response, THEN	**REFER THE RESPONSE TO THE NEXT LEVEL OF CODING.**

Appendix A

English and French Abbreviations for Major Field of Study Screen

Below is a list of all the abbreviations appearing in the Major Field of Study screen.

English Abbreviations for MFS Screen

Variable	Meaning
Never	Never attended school or attended kindergarten
None	None
ltoneyr	Less than 1 year of completed courses
yesfull	Full-time attendance
yespart	Part-time attendance, day or evening
secscce	Secondary (high) school graduation certification or equivalent
nunivce	Other non-university certificate or diploma (community college, CEGEP, technical institute.)
bachdeg	Bachelor's degree
unabvba	University certificate or diploma above bachelor level
masters	Master's degree
degrmed	Degree in medicine, dentistry, veterinary, optometry
doctora	Earned doctorate

French Abbreviations for MFS Screen

Variable	Meaning
aucune	Never attended school or attended kindergarten
mdunean	Less than 1 year of schooling completed
non	No, didn't attend any of those establishments in the last eight months
ouiplei	Yes, full time
ouipart	Part time, day or evening
aucun	No certificate or diploma from university (obtained from a college, CEGEP or technical institute)
ceetsec	Secondary (high) school graduation certification or equivalent
cemetie	Certificate from a technical school
cenuniv	Other non-university certificate or diploma (community college, CEGEP, technical institute)
ceuniv	University certificate or diploma below bachelor level
baccala	Bachelor's degree
unsupba	University certificate or diploma above bachelor level
maitris	Master's degree
diplmed	Degree in medicine, dentistry, veterinary science or optometry
doctora	Earned doctorate