**Memorandum**

**Date:** February 24, 2011

**To:** Shelly Martinez, Desk Officer

Office of Management and Budget

**From:** Lynda T. Carlson, Division Director

National Center for Science and Engineering Statistics

National Science Foundation

**Via:** Suzanne Plimpton, Reports Clearance Officer

National Science Foundation

**Subject:** Request for Approval of Methodological Work on the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS)

The National Science Foundation requests approval of methodological work for the GSS to determine: (1) institutions’ eligibility for the survey and (2) the best procedures to use to efficiently screen potentially eligible institutions. Approximately 500 institutions, primarily master-level institutions, have been identified using Integrated Postsecondary Education Data System (IPEDS) completions data and other sources as offering graduate degrees that may be eligible for the GSS. Eligibility will be determined for the branch campuses and separately organized schools that offer eligible graduate degree programs at the 500 institutions.

**Background**

The target population for the GSS is defined as U.S. academic institutions that offer graduate degree-credit programs in the sciences and engineering (as defined by NSF) and in health-related fields (as defined by NIH) in the U.S., including post-baccalaureate programs. An institution is considered eligible, or in-scope, if it meets at least one of the following criteria:

* Grants at least one master’s or doctoral degree in at least one program listed in selected NCES Classification of Instructional Programs (CIP) codes.
* Has at least one postdoctoral appointee or non-faculty research staff member conducting research in at least one of the following broad areas: agricultural sciences, computer sciences, engineering, environmental sciences, life sciences (biological and health), mathematical sciences, physical sciences, psychology, and social sciences.

The initial determination of the 500 institutions’ eligibility for the GSS was based on a review of the institutions’ websites for information pertaining to the CIP codes of graduate degree completions reported to IPEDS. While determining the institutions’ eligibility, the survey contractor also identified additional graduate programs that may have been eligible. The review resulted in assigning a code to each institution as “likely to be eligible”, “unlikely to be eligible”, or “undetermined” based on the eligibility of the graduate degree programs listed on the institutions’ website. The results of the initial eligibility determination after the QC review are displayed in Table 1 below.

Table1. Eligibility codes based on reviews of institutions’ websites

|  |  |  |
| --- | --- | --- |
| Code | Value | Number of institutions |
| 2 | Likely to be Eligible | 219 |
| 3 | Unlikely to be Eligible | 270 |
| 4 | Undetermined | 41 |
| 5 | Ineligible (School reported by existing GSS institution) | 20 |
| 6 | Ineligible (School closed) | 2 |
| 7 | Ineligible (No GSS-eligible programs identified at school) | 6 |
|  | Total | 558 |

We had originally planned to base the decision of whether or not to add institutions to the GSS only on the results of the website reviews. Given degree program variability within and across institutions and their schools, we decided that further screening is necessary to confirm and verify the eligibility of the degree programs offered.

**Proposed methodology**

Within institutions, schools will be contacted and asked to complete a short screener questionnaire via the web. The initial contact will be with the institutional research office with additional contacts to other offices (such as the graduate school) if the institutional research office contact cannot be identified. Large schools and schools that do not complete the web survey will be asked to complete the screener questionnaire by phone.

For most GSS-eligible fields of study, the screening process will confirm that a graduate degree identified in the IPEDS completion data and the institution website review is offered in that field. However, there are three conditions based on field types which will require additional screening to determine eligibility.

1. Some fields have specific practitioner degrees that are excluded from GSS: architecture, anesthesiology, dental sciences, nursing, ophthalmology, pharmaceutical sciences, veterinary science, clinical medicine (not elsewhere classified) and chemistry.

For these fields, respondents will be asked to list the graduate degree programs offered in the field.

1. In some GSS-eligible fields there are distinctions between research-oriented and practitioner-oriented degrees that are not clear by the name of the degree program. These fields are: nutrition, family and consumer sciences, communication disorders sciences, health-related fields (not elsewhere classified), psychology, political science/public administration.

For these fields, respondents will be asked to answer 4-5 additional items.

1. In two fields, engineering management and management information systems, there is a distinction between whether the degree is primarily a management degree or a science and engineering degree.

For these fields, respondents will be asked if they would categorize the program as a science and engineering program, management program, or multidisciplinary/interdisciplinary program.

The screener questionnaire and eligibility determination criteria are provided in Attachment 1. Answers to the screener questionnaire will be used to determine eligibility based on the criteria provided in Attachment 1. If there is a conflict between the eligibility statuses determined from the screener questionnaire versus the website review, the institution/school will be contacted to obtain additional information related to eligibility criteria. NSF will review the final recommendations made by the survey contractor concerning institutions’ eligibility and will decide which institutions to include in the 2011 GSS.

Results of the screening process will be analyzed to determine the best procedures for screening potentially eligible institutions/schools in future GSS cycles. For example, we will investigate whether there are CIP codes for which the degree program eligibility status was the same across all sources (IPEDS completion, institution website review, and screening survey). This will allow us to streamline the future screening process and increase efficiency.

The tentative schedule for this methodological work is as follows:

|  |  |
| --- | --- |
| **Proposed Date** | **Activity or Deliverable** |
| February 24, 2011 | OMB submission for approval |
| March 10, 2011 | OMB clearance |
| March 22, 2011 | Finalize instrument and send letters to presidents of potentially new institutions |
| March 28, 2011 | Send emails to contact persons at potentially new institutions to begin eligibility screening survey data collection |
| April 11, 2011 | Begin phone prompts, answer questions |
| May 23, 2011 | End eligibility screening survey data collection |
| June 15, 2011 | Preliminary institution database and methodology report available to NSF |
| July 8, 2011 | Final database and report available to NSF |
| August 5, 2011 | NSF approval of eligible institutions to be included in 2011 GSS |

**Response Burden**

We estimate approximately 250 burden hours for this methodological work: a 15 minute survey for approximately 1,000 departments in 500 institutions. Approximately 15 minutes per department should provide sufficient time for completing the screening questionnaire. This estimate is covered by the current GSS clearance which includes 360 burden hours for future testing needs.

Contact Person

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Human Resources Statistics Program

National Center for Science and Engineering Statistics

National Science Foundation

Attachment 1

1. Eligibility Screening Questions for GSS Frame Expansion

Introduction Questions (asked of all school respondents)

1. On behalf of NSF and NIH, we would like to ask you a few questions about some of your graduate programs and degrees to determine if <SCHOOLNAME> is eligible to participate in the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS).

1. Please answer 'Yes' or 'No' to indicate whether <SCHOOLNAME> offers graduate degrees in each of the following academic fields of study listed below.

[List academic field names identified from IPEDS and during school website review]

(YES/NO)

1. In addition to the academic fields of study that you reported in the previous question, please review the list below and select any fields in which <SCHOOLNAME> is offering graduate degrees.

Do not include certificate programs that only award professional degrees, such as AuD, DCS, DDS, DN, DNP, DO, DPM, DPT, DScPT, EdD, JD, MD, ND, OD, OTD, PharmD, PsyD, or master's in biomedical technology/technician, dental hygiene/hygienist, pharmacy, pharmaceutical sciences/administration, OT, PT, or nursing (except nursing science).

[List GSS eligible fields from Attachment 2]

For each field reported as “Yes” in Q2, followed by each field selected in Q3, ASK:

4. a) Please provide the name of the department at <SCHOOLNAME> that grants graduate degrees in <GSSCODE>. [ONLY ASKED ONCE] If you have more than one department that awards graduate degrees in this field, please enter the first of those departments.

(ENTER DEPT NAME)

b) What is the highest degree offered within this department?

(Master’s degree, Doctoral degree, Other degree-specify)

c) Please list all graduate degree programs offered by this department.

(ENTER DEGREE PROGRAM NAME: e.g., PhD in Clinical Psychology, Master’s in Organizational Psychology)

The GSS fields highlighted in blue in ATTACHMENT 2 will be screened further using the additional questions below.

The GSS fields highlighted in yellow (computer science and engineering management) will be screened using only the introduction questions 1-4 above and the question highlighted in yellow below.

Questions for master’s degree programs**[[1]](#footnote-1)** [Asked IF 4b=Master’s degree]

M1. a) Is the master’s degree program in the <department name> designed to prepare students to pursue a research doctorate? (YES/NO)

b) [IF YES:]  Over the last 3 years, approximately what percentage of students in the master’s program in <department name> have gone on to pursue a research doctorate?

(Less than 25%, 25-50%, Over 50%, DK)

c) [IF DK:] What is your best guess? (Less than 25%, 25-50%, Over 50%, DK)

M2. a) Is the master’s degree program in the <department name> designed to prepare students for research-oriented careers? (YES/NO)

b) [IF YES:]  Over the last 3 years, approximately what percentage of graduates from the master’s degree program in <department name> found jobs in research-oriented careers?

(Less than 25%, 25-50%, Over 50%, DK)

c) [IF DK:]  What is your best guess?   (Less than 25%, 25-50%, Over 50%, DK)

M3. a)  Does the master’s degree program in <department name> include a research requirement that students need to complete before obtaining their degree, for example, a research-based thesis? (YES/NO/OPTIONAL)

b)  [IF YES:]  What is the requirement? (OPEN ENDED RESPONSE)

M4. a)  Does the master’s degree program in <department name> lead to professional licensure?

(YES/NO/OPTIONAL)

b) [IF YES/OPTIONAL:]  Over the past 3 years, approximately what percent of graduates of the master’s degree program in <department name> took the licensing exam?

(Less than 25%, 25-50%, Over 50%, DK)

c) [IF DK:]  What is your best guess? (Less than 25%, 25-50%, Over 50%, DK)

M5. Finally, what type of work or study do the graduates with master’s degree in <department name> typically pursue after obtaining their degree? (OPEN ENDED RESPONSE)

M6. [Ask only for computer science/MIS and engineering management degree programs] Would you categorize the master’s degree program in [engineering management/management information systems or information sciences systems] as a:

[PROVIDE A CHECK BOX NEXT TO EACH CATEGORY BELOW SO MORE THAN ONE RESPONSES CAN BE SELECTED]

1. science and engineering program,
2. management program, or

c) multidisciplinary/interdisciplinary program?

**Questions for doctorate-level programs** [Asked IF 4b=doctoral degree:]

D1. a) Is the doctoral degree program in <department name> designed to prepare students for research-oriented careers? (YES/NO)

1. [IF YES:]  Over the last 3 years, approximately what percentage of graduates from the doctorate program in <department name> found jobs in research-oriented careers?

(Less than 25%, 25-50%, Over 50%, DK)

c) [IF DK:] What is your best guess?   (Less than 25%, 25-50%, Over 50%, DK)

D2. a) Does this doctorate program in <department name> include a research requirement that students need to complete before obtaining their degree, for example, a research-based thesis?

(YES/NO/OPTIONAL)

b) [IF YES:]  What is the requirement? (OPEN ENDED RESPONSE)

D3. a) Does the doctoral degree program in <department name> lead to professional licensure?

(YES/NO/OPTIONAL)

b) [IF YES/OPTIONAL:]  Over the past 3 years, approximately what percent of graduates of the doctoral degree program in <department name> took the licensing exam?

(Less than 25%, 25-50%, Over 50%, DK)

c.) [IF DK:]  What is your best guess?   (Less than 25%, 25-50%, Over 50%, DK)

D4. Finally, what type of work or study do the graduates with doctoral degree in <department name> typically pursue after obtaining their doctorate? (OPEN ENDED RESPONSE)

D5. [Ask only for computer science/MIS and engineering management degree programs] Would you categorize the doctoral degree program in [engineering management/management information systems or information sciences systems] as:

[PROVIDE A CHECK BOX NEXT TO EACH CATEGORY BELOW SO MORE THAN ONE RESPONSES CAN BE SELECTED]

1. science and engineering program,
2. management program, or
3. multidisciplinary/ interdisciplinary program?
4. Is there another department that grants graduate degrees in <GSSCODE>? (YES/NO)

IF YES: GO BACK TO Q4a.

IF NO: LOOP IS REPEATED FOR THE NEXT FIELD.

1. **Eligibility Determination Criteria for Selected Fields That Require Additional Screening Questions**
2. A program eligibility variable will be constructed using the initial questions in the research/practice question series (QM1a – QM3a/QD1a-QD2a).  Degree programs that have yes answers to 2 of these questions will be considered eligible, although their status will be reviewed if the respondent also answered yes to the professional licensing question (QM4a/QD3a).  Degree programs that have a yes answer to only 1 of these questions will be reviewed using information from the school website review the followup questions (QM5/QD4).  Degree programs with all no answers to the first question series will be considered ineligible.
3. A response quality variable will also be constructed using each of the follow-up sub-questions in the research/practice series.  If the degree programs are research oriented (Yes to QM1a/QM2a/QD1a), cases would get a code of 100 if they said that 50%+ of their students pursue a research doctorate (QM1b), and another 100 if they said that 50%+ work in research oriented fields (QM2b/QD1b), and an additional 100 if they provided valid research requirements (QM3b/QD2b).  Lower points (10 each ) would be given if less than 50% pursued research doctorates or work in research oriented fields, and 1 point would be given for don’t know responses.  The point values should not be considered weights; the values are assigned to make sure that unique patterns of response are captured in the variable. These response quality variables will be summed to create a Total Quality Response Variable for each degree program.
4. A crosstab will be run on the program eligibility variable by the response quality variable.  Programs deemed to be eligible that have values of less than 200 on the Total Quality Response variable will be reviewed for further determination.

One of the reasons the follow-up sub-questions are included although qualitative in nature is that the school respondents, when asked about whether their students pursue research careers/study, sometimes over-report such instances.

Algorithm for determining final eligibility:

1. Program eligibility

Count the number of Yes answers to QM1a, QM2a/QD1a, and QM3a/QD2a.

* If TotalYes = 2 or 3, and QM4/QD3 = No then Program = Eligible.
* If TotalYes = 2 or 3, and QM4/QD3 = Yes then Program = Eligible unless degree exclusions apply.
* If TotalYes = 1 and QM4/QD3 = No then review QM5/QD4 responses and decide eligibility.
* If TotalYes = 1 and QM4/QD3 = Yes then review QM5/QD4 responses and decide eligibility.
* If TotalYes = 0 then Program = Ineligible.

2.  Response quality

* Recode RQM1: 100 if QM1a=1 and (QM1b or QM1c)>50%; 10 if QM1a=1 and (QM1b or QM1c)>50%; or 1 if QM1a=1 and (QM1b or QM1c)=DK.
* Recode RQM2/RQD1: 100 if QM2a/QD1a=1 and QM2b/QM2c/QD1b/QD1c >50%; 10 if QM2a/QD1a=1 and QM2b/QM2c/QD1b/QD1c < 50%; or 1 if QM2a/QD1a=1 and QM2c/QD1c=DK.
* Recode RQM4/RQD3: 100 if QM4a/QD3a=1 and QM4b/QD3b/QM4c/QD3c >50%; 10 if QM4a/QD3a=1 and QM4b/QM4c/QD3b/QD3c< 50%; or 1 if QM4a/QD4a=1 and QM4c/QD3c=DK.
* Recode RQM3/RQD2: 100 if QM3a/QD2a=1 and QM3b/QD2b = valid research requirements; 10 if QM3a/QD2a=1 and QM3b/QD2b =invalid research requirements; or 1 if QM3a/QD2a=1 and QM3b/QD2b=DK.

1. Total quality response

For master’s program: Sum (RQM1, RQM2, RQM3, RQM4);

For doctorate program: Sum (RQD1, RQD2, RQD3)

## **Attachment 2**

**2010 Survey of Graduate Students and**

**Postdoctorates in Science and Engineering (GSS)**

**Complete List of Eligible Fields and Codes**

**Contents:**

[Agricultural Science Fields 8](#_Toc243299253)

[Architecture Fields 9](#_Toc243299254)

[Biological Science Fields 9](#_Toc243299255)

[Communication Fields 10](#_Toc243299256)

[Computer Science Fields 10](#_Toc243299257)

[Earth, Atmospheric, and Ocean Science Fields 10](#_Toc243299258)

[Engineering Fields 10](#_Toc243299259)-[11](#_Toc243299260)

[Family and Consumer Sciences/Human Sciences Fields 11](#_Toc243299261)

[Health Fields 11](#_Toc243299262)-[13](#_Toc243299263)

[Mathematical Science Fields 13](#_Toc243299264)

[Physical Science Fields 13](#_Toc243299265)[-14](#_Toc243299266)

[Psychology Fields 14](#_Toc243299267)

[Social Science Fields 14](#_Toc243299268)[-15](#_Toc243299269)

[Multidisciplinary/Interdisciplinary Studies 15](#_Toc243299270)

Please do not include certificate programs or units that only award professional degrees, such as AuD, DDS, DN, DNP, DO, DPM, DPT, DScPT, JD, MD, ND, OD, OTD, PharmD, or PsyD.

| **Field** | **GSS code** | **Additional Program Titles** | | |
| --- | --- | --- | --- | --- |
| Agricultural Science Fields **(see also 102)** | | | | |
| Agricultural Economics | 901 | Natural Resource Economics | |  |
| Agricultural Sciences | 501 | Agricultural and Horticultural Plant Breeding  Agricultural Animal Breeding  Agriculture, Agriculture Operations and Related Sciences  Agronomy and Crop Science  Animal Health  Animal Nutrition  Animal Sciences  Dairy Science  Environmental Science  Environmental Studies  Fishing and Fisheries Sciences and Management  Food Science  Food Science and Technology  Food Technology and Processing  Forest Management/Forest Resources Management  Forest Resources Production and Management  Forest Sciences and Biology  Forestry | | Horticultural Science  International Agriculture  Land Use Planning and Management/Development  Livestock Management  Natural Resources Management and Policy  Natural Resources/Conservation  Ornamental Horticulture  Plant Protection and Integrated Pest Management  Plant Sciences  Poultry Science  Range Science and Management  Soil Chemistry and Physics  Soil Microbiology  Soil Science and Agronomy  Soil Sciences  Urban Forestry  Water, Wetlands, and Marine Resources Management  Wildlife and Wildlands Science and Management |
| Architecture Fields |  |  | |  |
| Architecture (exclude MArch, DArch., and DED) | 940 |  |  | | |
| Biological Science Fields | | | | |
| Anatomy | 601 |  | |  |
| Biochemistry | 602 | Biochemistry/Biophysics and Molecular Biology | |  |
| Biology | 603 | Biological Sciences | |  |
| Biometry and Epidemiology | 604 | Bioinformatics  Biomathematics  Biometry/Biometrics | | Biostatistics  Medical Informatics |
| Biophysics | 605 |  | |  |
| Botany | 606 | Plant Biology  Plant Molecular Biology | | Plant Pathology/Phytopathology  Plant Physiology |
| Cell and Molecular Biology | 607 | Cell Biology and Anatomy  Cell/Cellular and Molecular Biology  Cell/Cellular Biology and Histology  Developmental Biology and Embryology | | Molecular Biochemistry  Molecular Biophysics  Neuroanatomy  Photobiology  Structural Biology |
| Ecology | 608 |  | |  |
| Entomology and Parasitology | 609 |  | |  |
| Genetics | 610 | Animal Genetics  Evolutionary Biology  Human/Medical Genetics | | Microbial and Eukaryotic Genetics  Molecular Genetics  Plant Genetics |
| Microbiology, Immunology, and Virology | 611 | Medical Microbiology and Bacteriology  Mycology | |  |
| Neuroscience | 950 |  | |  |
| Nutrition[[2]](#endnote-1) | 612 | Foods, Nutrition  Human Nutrition | | Nutrition Science |
| Pathology | 613 | Experimental Pathology | |  |
| Pharmacology | 614 | Environmental Toxicology  Molecular Pharmacology  Molecular Toxicology | | Neuropharmacology  Pharmacology and Toxicology  Toxicology |
| Physiology | 615 | Cell Physiology  Exercise Physiology  Molecular Physiology  Neurobiology and Neurophysiology | | Oncology and Cancer Biology  Physiology, Pathology, and Related Sciences  Reproductive Biology  Vision Science/Physiological Optics |
| Zoology | 616 | Animal Behavior and Ethology  Animal Biology | | Animal Physiology  Wildlife Biology |
| Biosciences, not elsewhere classified | 617 | Aquatic Biology/Limnology  Bioethics/Medical Ethics  Biological and Life Sciences, Other  Biomedical Sciences  Biotechnology  Conservation Biology | | Ecology, Evolution, Systematics and Population Biology  Environmental Biology  Medical Illustration  Population Biology  Systematic Biology/Biological Systematics |
| Communication Fields |  |  | | |
| Communication | 930 | Communication and Media Studies  Communication Studies/Speech Communication and Rhetoric  Digital Communication and Media/Multimedia | | Health Communication  Mass Communication/Media Studies  Organizational Communication  Political Communication |
| Computer Science Fields |  |  | |  |
| Computer Science (exclude DCS) | 401 | Artificial Intelligence and Robotics  Computer and Information Sciences  Computer and Information Systems Security  Computer Graphics  Computer Systems Analysis/Analyst | | Computer Systems Networking and Telecommunications  Data Modeling/Warehousing and Database Administration  Information Science/Studies  Information Technology  Management Information Systems  Management Science |
| Earth, Atmospheric, and Ocean Science Fields | | | | |
| Atmospheric Sciences | 301 | Atmospheric Chemistry and Climatology | | Atmospheric Physics and Dynamics  Meteorology |
| Geosciences | 302 | Geochemistry  Geochemistry and Petrology  Geology/Earth Science | | Geophysics and Seismology  Hydrology and Water Resources Science  Paleontology |
| Ocean Sciences | 303 | Marine Biology and Biological Oceanography | | Oceanography, Chemical and Physical |
| Earth, Atmospheric, and Ocean Sciences, not elsewhere classified | 304 |  | |  |
| Engineering Fields | |  | | |
| Aerospace Engineering | 101 | Aeronautical Engineering | | Astronautical Engineering |
| Agricultural Engineering | 102 | Bioengineering | | Biological Engineering |
| Biomedical Engineering | 103 | Biomedical/Medical Engineering | | Biomedical Technology/ Technician (exclude master's) |
| Chemical Engineering | 104 | Polymer/Plastics Engineering | | Wood Science and Wood Products/Pulp and Paper Technology |
| Civil Engineering | 105 | Architectural Engineering  Environmental/Environmental Health Engineering  Geotechnical Engineering  Structural Engineering | | Surveying Engineering  Transportation and Highway Engineering  Water Resources Engineering |
| Electrical Engineering | 106 | Communication Engineering  Computer Engineering  Computer Hardware Engineering | | Computer Software Engineering  Electronics Engineering |
| Engineering Science & Physics | 107 | Engineering Physics | | Engineering Science |
| Industrial/Manufacturing Engineering | 108 | Operations Research | | Systems Engineering |
| **Engineering Fields - continued next page** | | | | |
| Engineering Fields – continued | | | | |
| Mechanical Engineering | 109 | Engineering Mechanics | |  |
| Metallurgical and Materials Engineering | 110 | Ceramic Sciences and Engineering  Materials Science | | Textile Science  Textile Sciences and Engineering |
| Mining Engineering | 111 | Geological/Geophysical Engineering | | Mineral Engineering |
| Nuclear Engineering | 112 |  | |  |
| Petroleum Engineering | 113 |  | |  |
| Engineering, not elsewhere classified | 114 | Construction Engineering  Forest Engineering | | Naval Architecture and Marine Engineering  Ocean Engineering |
| Family and Consumer Sciences/Human Sciences Fields | | | | |
| Family and Consumer Sciences/Human Sciences | 920 | Adult Development and Aging  Business Family and Consumer Sciences/Human Sciences  Child Development  Consumer Economics | | Family Systems  Housing and Human Environments  Human Development and Family Studies |
| Health Fields **(see also 103)** | |  | | | | |
| Anesthesiology | 701 | Nurse Anesthetist (exclude master’s) | | |
| Cardiology | 702 | Cardiovascular Science | | Cardiovascular Diseases |
| Communication Disorders Sciences | 723 | Audiology/Audiologist and Hearing Sciences (exclude AuD)  Audiology/Audiologist and Speech Language Pathology/ Pathologist | | Communication Disorders Sciences and Services, Other  Speech-Language Pathology/Pathologist |
| Dental Sciences | 718 | Advanced/Graduate Dentistry and Oral Sciences, Other (exclude DDS)  Dental Clinical Sciences, General  Dental Hygiene/Hygienist (exclude master’s)  Dental Materials  Dental Public Health and Education | | Endodontics/Endodontology  Oral Biology and Oral Pathology  Oral/Maxillofacial Surgery  Orthodontics/Orthodontology  Pediatric Dentistry/Pedodontics  Periodontics/Periodontology  Prosthodontics/Prosthodontology |
| Endocrinology | 704 | Pediatric Endocrinology | |  |
| Gastroenterology | 705 |  | |  |
| Hematology | 706 | Pediatric Hematology | |  |
| Neurology | 707 |  | |  |
| Nursing Science (research master’s & PhD only) | 719 |  | |  |
| **Health Fields - continued next page** | | | | |
| **Health Fields (see also 103) – continued** | | | | |
| Nursing (exclude master’s, ND & DNP) | 719 | Adult Health Nurse/Nursing (exclude master’s)  Clinical Nurse Specialist (exclude master’s)  Critical Care Nursing (exclude master’s)  Family Practice Nurse/Nurse Practitioner (exclude master’s)  Maternal/Child Health and Neonatal Nurse/Nursing (exclude master’s)  Nurse Midwife/Nursing Midwifery (exclude master’s)  Nursing – Registered Nurse Training (exclude master’s)  Nursing Administration (exclude master’s) | | Nursing, Other (exclude master’s)  Occupational and Environmental Health Nursing (exclude master’s)  Pediatric Nurse/Nursing (exclude master’s)  Perioperative/Operating Room and Surgical Nurse/Nursing (exclude master’s)  Psychiatric/Mental Health Nurse/Nursing (exclude master’s  Public Health/Community Nurse/Nursing (exclude master’s) |
| Obstetrics and Gynecology | 708 |  | |  |
| Oncology/Cancer Research | 703 | Pediatric Oncology | |  |
| Ophthalmology (exclude OD) | 709 |  | |  |
| Otorhinolaryngology | 710 |  | |  |
| Pediatrics | 711 | Prematurity & Newborn | |  |
| Pharmaceutical Sciences (exclude PharmD) | 720 | Clinical and Industrial Drug Development  Industrial and Physical Pharmacy and Cosmetic Sciences  Medicinal and Pharmaceutical Chemistry  Natural Products Chemistry and Pharmacognosy  Pharmaceutics and Drug Design | | Pharmacoeconomics/ Pharmaceutical Economics  Pharmacy Administration/Policy/ Regulatory Affairs (exclude master’s)  Pharmacy, Pharmaceutical Sciences, and Administration, Other (exclude master’s) |
| Preventive Medicine and Community Health | 712 | Environmental Health  Health Services/Allied Health/Health Sciences  Health/Medical Physics  International Public Health/ International Health | | Maternal and Child Health  Occupational Health and Industrial Hygiene  Public Health Education and Promotion  Public Health  Public Health Medicine |
| Psychiatry | 713 | Behavioral Medicine (clinical) | | Child Psychiatry |
| Pulmonary Disease | 714 |  | |  |
| Radiology | 715 | Radiation Biology/Radiobiology  Radiation Oncology/Therapeutic Radiology | | Radiation Protection/Health Physics Technician |
| Surgery | 716 | Orthopedics/Orthopedic Surgery | |  |
| **Health Fields - continued next page** | | | | |

| **Field** | **GSS code** | **Additional Program Titles** | |
| --- | --- | --- | --- |
| Health Fields (see also 103) – continued | | | |
| Veterinary Sciences (exclude DVM) | 721 | Comparative and Laboratory Animal Medicine  Large Animal/Food Animal & Equine Surgery/Medicine  Small/Companion Animal Surgery and Medicine  Veterinary Anatomy  Veterinary Biomedical and Clinical Sciences  Veterinary Biomedicine and Clinical Sciences | Veterinary Infectious Diseases  Veterinary Medicine  Veterinary Microbiology and Immunobiology  Veterinary Pathology and Pathobiology  Veterinary Physiology  Veterinary Preventive Med Epidemiology/Public Health  Veterinary Toxicology and Pharmacology |
| Clinical Medicine, not elsewhere classified (exclude DN, OD, DO, DPM, & MD) | 717 | Aerospace Medicine  Allergy  Clinical Laboratory Medicine  Clinical Laboratory Science/Medical Technology/ Technologist  Clinical/Medical Laboratory Science and Allied Professions, Other (exclude master’s)  Complementary and Alternative Medicine  Connective Tissue Diseases  Critical Care Medicine  Dermatology  Diabetes  Emergency Medicine | Family Medicine  Infectious Diseases  Internal Medicine  Gene Therapy  HIV/AIDS  Liver Diseases  Medical Scientist (exclude MD)  Metabolic diseases  Nephrology  Neurology/Neurosurgery  Occupational Medicine  Palliative Care  Physical Medicine and Rehabilitation/Physiatry  Trauma  Urology |
| Health-Related, not elsewhere classified | 722 | Assistive/Augmentative Technology and Rehabilitation Engineering  Athletic Training/Trainer - Sports Medicine  Exercise Science/Physiology and Movement Studies | Health Professions and Related Clinical Sciences, Other (exclude master’s)  Occupational Therapy/Therapist (exclude master’s and OTD)  Physical Therapy/Therapist (exclude master’s, DPT, and DScPT) |
| **Interdisciplinary - see Multidisciplinary/Interdisciplinary Studies on page 8** | | | |
| Mathematical Science Fields | |  | |
| Mathematics and Applied Mathematics | 402 | Algebra and Number Theory  Analysis and Functional Analysis  Computational Mathematics | Geometry/Geometric Analysis  Topology and Foundations |
| Statistics | 403 | Actuarial Science  Business Statistics | Mathematical Statistics and Probability |
| **Multidisciplinary - see Multidisciplinary/Interdisciplinary Studies on page 8** | | | |
| Physical Science Fields |  |  | |
| Astronomy | 201 | Astrophysics | Planetary Astronomy and Science |
| Biochemistry | 602 | Biochemistry/Biophysics and Molecular Biology |  |
| **Physical Science Fields - continued next page** | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Field** | | **GSS code** | | **Additional Program Titles** | | | | |
| Physical Science Fields – continued | | | | | | | | |
| Chemistry (exclude ChemD) | | 202 | | Analytical Chemistry  Chemical Physics  Inorganic Chemistry  Organic Chemistry | | Physical and Theoretical Chemistry  Polymer Chemistry | | |
| Physics (see also 605) | | 203 | | Acoustics  Atomic/Molecular Physics  Elementary Particle Physics  Nuclear Physics  Optics/Optical Sciences | | Plasma and High-Temperature Physics  Solid State and Low -Temperature Physics  Theoretical and Mathematical Physics | | |
| Physical Sciences, not elsewhere classified | | 204 | |  | |  | | |
| Psychology Fields | | | | | | | |
| Clinical Psychology (exclude PsyD) | 803 | | Clinical Child Psychology | |  | |
| Psychology, Combined | 801 | | Psychology, General | |  | |
| Psychology, except Clinical | 802 | | Art Therapy (exclude master’s)  Cognitive Psychology and Psycholinguistics  Community Psychology  Comparative Psychology  Counseling Psychology  Developmental and Child Psychology  Educational Psychology  Environmental Psychology  Experimental Psychology  Family Psychology  Forensic Psychology | | Geropsychology  Health Psychology  Industrial and Organizational Psychology  Personality Psychology  Physiological Psychology/Psychobiology  Psychology, Other  Psychometrics and Quantitative Psychology  Psychopharmacology  School Psychology  Social Psychology | |
| Social Science Fields |  | |  | | | |
| Agricultural Economics | 901 | | Natural Resource Economics | |  | |
| Anthropology (Cultural and Social) | 902 | | Archeology | | Physical Anthropology | |
| Economics | 903 | | Applied Economics  Business/Managerial Economics  Development Economics and International Development | | Econometrics and Quantitative Economics  International Economics | |
| Geography | 904 | | Cartography | |  | |
| History and Philosophy Of Science (combined program) | 905 | | History and Philosophy of Science/Technology | |  | |
| Linguistics | 906 | | Linguistics of ASL, and Other Sign Languages | |  | |
| Political Science/Public Administration | 907 | | American Government and Politics  Canadian Government and Politics | | International Relations and Affairs  Political Science and Government  Public Policy Analysis | |
| **Social Science Fields - continued next page** | | | | | | |
| **Field** | **GSS code** | | **Additional Program Titles** | | | |
| Social Science Fields – continued | | | | | | |
| Sociology | 908 | | Demography and Population Studies | |  | |
| Sociology/Anthropology (combined program) | 909 | |  | |  | |
| Social Sciences, not elsewhere classified | 910 | | African Studies  African-American/Black Studies  American Indian/Native American Studies  American/United States Studies/Civilization  Area Studies  Asian Studies/Civilization  Asian-American Studies  Balkans Studies  Baltic Studies  Canadian Studies  Caribbean Studies  Central/Middle and Eastern European Studies  Chinese Studies  Commonwealth Studies  Criminal Justice/Safety Studies  Criminalistics and Criminal Science  Criminology  East Asian Studies  Ethnic, Cultural Minority, and Gender Studies, Other  European Studies/Civilization  Forensic Science and Technology  French Studies  Gay/Lesbian Studies | | German Studies  Hispanic-American, Puerto Rican, Mexican American Studies  Italian Studies  Japanese Studies  Korean Studies  Labor Studies  Latin American Studies  Near and Middle Eastern Studies  Organizational Behavior Studies  Pacific Area/Pacific Rim Studies  Polish Studies  Regional Studies (US, Canadian, Foreign)  Russian Studies  Scandinavian Studies  Slavic Studies  South Asian Studies  Southeast Asian Studies  Spanish and Iberian Studies  Tibetan Studies  Ukraine Studies  Ural-Altaic and Central Asian Studies  Urban Affairs/Studies  Western European Studies  Women's Studies | |
| Multidisciplinary/Interdisciplinary Studies | | | | | | |
| Multidisciplinary/ Interdisciplinary Studies | 980 | | Accounting and Computer Science (combined program)  Behavioral Sciences  Biological and Physical Sciences  Biopsychology  Cognitive Science  Gerontology  Holocaust and Related Studies  Intercultural/Multicultural and Diversity Studies  International/Global Studies | | Mathematics and Computer Science (combined program)  Natural Sciences  Peace Studies and Conflict Resolution  Science, Technology and Society  Systems Science and Theory | |

1. If respondents indicate the degree offered is “other” in Q5, they will be asked the same questions as for master’s degree programs, replacing the word “master’s” with “graduate”. Questions will be asked about “other” programs only if the respondent lists no doctoral or masters programs. [↑](#footnote-ref-1)
2. The GSS fields highlighted in blue and yellow will be ASKED ADDITIONAL screenING QUESTIONS as indicated in attachment 1. [↑](#endnote-ref-1)