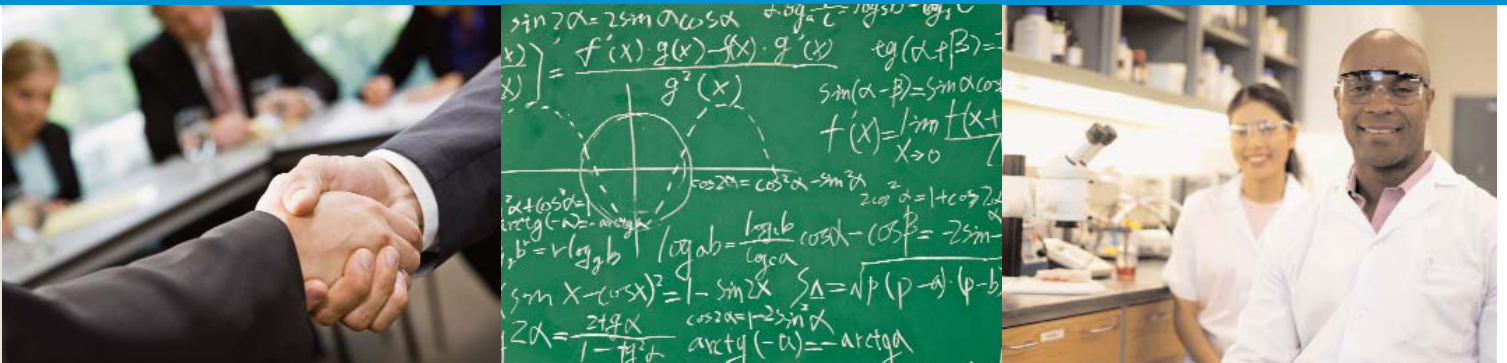


# Enrollment and Degrees in Professional Science Master's (PSM) Programs: 2012





**Enrollment and Degrees in Professional Science Master's (PSM) Programs: 2012**

Jeffrey R. Allum  
Director, Research and Policy Analysis  
Council of Graduate Schools

Leila M. Gonzales  
Manager of Surveys and Information Services  
Council of Graduate Schools

Jeannette K. Remington  
Program Manager  
Council of Graduate Schools

The *2012 Professional Science Master's Enrollment and Degrees Survey* was conducted by the Council of Graduate Schools with a grant from the Alfred P. Sloan Foundation. The survey is designed to provide information about applications to Professional Science Master's (PSM) programs, enrollment in these programs, and degrees awarded. A PDF version of this survey report is available online at [www.cgsnet.org](http://www.cgsnet.org) and [www.sciencemasters.com](http://www.sciencemasters.com). For more information about the survey or the survey report, please contact:

**Council of Graduate Schools**

One Dupont Circle NW, Suite 230  
Washington, DC 20036-1173  
[www.cgsnet.org](http://www.cgsnet.org)

Leila M. Gonzales  
(202) 223-3791  
[lgonzales@cgs.nche.edu](mailto:lgonzales@cgs.nche.edu)

Jeffrey R. Allum  
(202) 223-3791  
[jallum@cgs.nche.edu](mailto:jallum@cgs.nche.edu)

Jeannette K. Remington  
(202) 223-3791  
[jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu)

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We also wish to thank the graduate deans at CGS' member institutions for encouraging Professional Science Master's (PSM) program directors to complete the survey and for providing assistance with data collection and reporting. The leadership of the National Professional Science Master's Association (NPSMA) has been an ongoing source of support for the PSM initiative.

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Finally, and most importantly, this report would not be possible without the PSM coordinators, program directors, and staff at the 279 programs in 114 institutions who participated in this survey. We are grateful for your efforts in providing data in a timely manner, and we hope that this report supports the growth and success of your PSM programs.



## Executive Summary

The *2012 Professional Science Master's Enrollment and Degrees Survey* collects data on overall enrollment and degrees awarded in Professional Science Master's (PSM) programs. This is the third such survey conducted by the Council of Graduate Schools (CGS) with a grant from the Alfred P. Sloan Foundation.

PSM program directors and graduate deans (or equivalent) representing 299 PSM programs from 124 institutions of higher education were invited to provide data regarding the number of applications received for admission for the fall term of 2012, the number of applications accepted for the fall term of 2012, the number of first-time enrollees for the fall term of 2012, the total number of enrollees for the fall term of 2012, and the number of degrees awarded during the 2011/12 academic year (July 1, 2011 to June 30, 2012). The survey generated 279 usable responses, for a 93% response rate. Of these, 248 reported students who were either enrolled in a PSM program in the fall term of 2012 or graduated from a PSM program during the 2011/12 academic year.

### Applications

Survey respondents reported a total of 6,181 applications for admission to PSM programs for the fall term of 2012, 6,014 of which were for U.S.-based programs. Among U.S.-based programs, 74% of applications were received by public institutions, and 26% were received by private, not-for-profit institutions. PSM programs in mathematics and statistics received more applications than programs in other fields of study, constituting 35% of all applications received for the fall term of 2012, followed by biotechnology (21%).

Respondents to the survey reported that 2,944 applications were accepted for the fall term of 2012. Among U.S.-based PSM programs, 74% of the applications accepted were for admission to public institutions, and 26% were for admission to private, not-for-profit institutions: sixty-seven percent were for admission to doctoral institutions, and 33% were for admission to master's-focused, specialized, or other institutions.

The overall acceptance rate for the PSM programs responding to the survey was 48%. Among U.S.-based programs, the acceptance rate was 47% at both public and private, not-for-profit institutions. The acceptance rate was 42% at doctoral institutions, and 61% at master's-focused, specialized, or other institutions based in the United States.

### First-Time Enrollment

A total of 1,884 students were enrolled for the first time in a PSM program in fall 2012, 1,775 of whom were enrolled in programs based in the United States. Slightly more than one-half (51%) of all first-time students were men, and slightly less than one-half (49%) were women. Nearly two-thirds (63%) of all first-time students were enrolled full-time, and just over one-third (37%) were

enrolled part-time. The four largest fields of study with respect to first-time enrollments were mathematics and statistics (21%), biotechnology (19%), environmental sciences and natural resources (13%), and other interdisciplinary sciences (12%). These four fields of study constituted 65% of all first-time enrollees in PSM programs in fall 2012.

Slightly more than one-fifth (22%) of first-time enrollees in U.S.-based PSM programs were temporary residents (i.e., international students). Among U.S. citizens and permanent residents who were enrolled for the first-time in a PSM program in fall 2012, 22% were underrepresented minorities (Hispanic/Latino, American Indian/Alaska Native, or Black/African American). Roughly three-quarters (73%) were Asian/Pacific Islander or White, and 5% were either of two or more races or their race/ethnicity was unknown.

The overall yield rate, which is the number of first-time enrollees divided by the number of applications accepted, was 64% across all PSM programs. Among U.S.-based institutions, the yield rate for public institutions (68%) was higher than the yield rate for private, not-for-profit institutions (47%). The yield rate was also higher at master's-focused, specialized, or other institutions (61%) than at doctoral institutions (42%).

### **Total Enrollment**

A total of 5,804 students were enrolled in PSM programs in the fall term of 2012, 5,629 of whom were enrolled at U.S.-based institutions. More than one-half (55%) of total enrollees in PSM programs were men, and slightly less than one-half (45%) were women. Three of every five (60%) PSM students were enrolled part-time, compared to two of every five (40%) who were enrolled full-time. At U.S.-based institutions, 15% of all enrollees were temporary residents. Among U.S. citizens and permanent residents, 25% of enrollees in fall 2012 were underrepresented minorities, 69% were Asian/Pacific Islander or White, and 6% were either of two or more races or their race/ethnicity was unknown.

Total PSM enrollment in fall 2012, as reported by all survey respondents, was dominated by four fields of study. More than three-quarters of all PSM students were pursuing degrees in computer/information sciences (21%), biotechnology (16%), environmental sciences and natural resources (14%), or mathematics and statistics (14%).

### **Degrees**

Institutions responding to the survey awarded 1,754 PSM degrees in academic year 2011/12 (July 1, 2011 to June 30, 2012), the vast majority (1,691) of which were granted by U.S.-based institutions. Just over one-half (52%) of the 1,754 degrees were awarded to men, while 48% were awarded to women. Roughly one in five (17%) graduates of U.S.-based PSM programs were temporary residents. Among U.S. citizens and permanent residents, 23% of PSM graduates in 2011/12 were underrepresented minorities, just over two-thirds (69%) were Asian/Pacific Islander or White, and 8% were either of two or more races or their race/ethnicity was unknown.

Biotechnology and computer/information sciences comprised the largest number of PSM degrees awarded in 2011/12. These two fields combined awarded 42% of all PSM degrees awarded that academic year: 22% and 20%, respectively. Mathematics and statistics and environmental sciences and natural resources collectively awarded nearly one-third of all degrees in 2011/12: 16% and 15%, respectively.

### **Changes from 2010 to 2012**

Data from the 2010, 2011, and 2012 Professional Science Master's Enrollment and Degrees Surveys represent a very comprehensive picture of trends in PSM applications, enrollments, and degrees since response rates were 89%, 95% and 93%. However, because the number of PSM programs are increasing and the size of PSM programs is varied, it is necessary to portray changes over the 2010 to 2012 period in two separate ways in order to capture both the changes in the overall PSM initiative and in the subset of programs that have responded to all three of the Professional Science Master's Enrollment and Degrees Surveys.

First, comparisons were made using all respondents to these surveys to show changes in the overall PSM initiative between 2010 and 2012. The advantage of this method is that it portrays the overall status of the PSM initiative using the most comprehensive dataset available. The disadvantage in this approach is that year-to-year changes may be distorted due to years in which institutions did not provide data.

The second comparison used only programs that responded to the 2010, 2011, and the 2012 Professional Science Master's Enrollment and Degrees Surveys (n=165) in order to restrict the comparisons to the identical set of institutions that responded to all three surveys. The advantage of this method is that it more accurately depicts changes among those PSM programs that responded to all three surveys. The disadvantage of this comparison is that it represents a subset of the full population of PSM programs (e.g., some PSM programs only started enrolling students in 2011 or in 2012, and not all PSM programs responded to all three of the surveys).

### **Comparisons Using Only Programs That Responded to All Three Surveys**

Using data from only those PSM programs that responded to 2010, 2011, and the 2012 *Professional Science Master's Enrollment and Degrees Surveys*, there was an 18% increase in applications received between 2010 and 2012, from 3,878 applications received for fall 2010 to 4,557 applications received for fall 2012. The number of applications accepted increased by 15%, from 1,905 in 2010 to 2,186 in 2012. PSM programs that responded to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported an 8% increase in first-time enrollment, from 1,329 in 2010 to 1,440 in 2012, and 10% increase in total enrollment, from 4,459 in 2010 to 4,894 in 2012. Among those PSM programs responding to the 2010, 2011, and 2012 surveys, there was a 46% increase in the number of PSM degrees awarded, from 1,023 in academic year 2009/10 to 1,496 in 2011/12.

## Introduction

The Professional Science Master's (PSM) is designed to allow students to pursue advanced training in science, while developing workplace skills highly valued by employers. PSM programs prepare graduates for careers in business, government, and non-profit organizations, combining rigorous study in science and/or mathematics with coursework in management, policy, law, or related fields. Along with an emphasis on writing, leadership, and communication skills, most PSM programs require a final project or team experience, as well as an internship in a business or public sector setting.

The PSM initiative began in 1997 with funding from the Alfred P. Sloan Foundation to support the establishment of programs in the natural sciences and mathematics at research institutions (Council of Graduate Schools, 2011). In 2001, a Sloan Foundation grant to the Council of Graduate Schools (CGS) extended the PSM initiative to master's-focused institutions. In 2006, CGS assumed primary responsibility for supporting and expanding the PSM degree, with the goal of making it a regular feature of U.S. graduate education. As of July 2012, 299 programs from 124 institutions were recognized as PSMs by CGS. For more information about the PSM initiative, and for a complete list of PSM programs, please visit [www.sciencemasters.com](http://www.sciencemasters.com).

The *Professional Science Master's Enrollment and Degrees Survey* is an annual survey of enrollment and degrees in PSM programs. Previous PSM enrollment and degrees surveys were conducted for academic years 2007/08 and 2008/09 by the National Professional Science Master's Association (2009a, 2009b), and for 2009/10 and 2010/11 by the Council of Graduate Schools (Bell & Allum, 2011; Bell & Allum, 2012). The 2012 survey collects data regarding applications, first-time enrollment, total enrollment, and degrees awarded.

## Research Design

The *2012 Professional Science Master's Enrollment and Degrees Survey* was designed using more than 20 enrollment and degrees surveys as models. The questionnaire was constructed to collect the necessary data while remaining user-friendly for respondents. The survey questionnaire, which appears in the Appendix, includes 43 question items.

## Data Collection

The survey launched on October 18, 2012 via an e-mail to PSM program directors and graduate deans (or equivalent) representing the 299 PSM programs from 124 institutions of higher education that were recognized as PSM programs as of September 25, 2012. E-mail reminders and telephone calls were used to collect data from non-respondents. The survey closed on December 12, 2012, after collecting 279 usable responses, for a 93% response rate.

Invitees were asked to provide data regarding the number of applications received for admission for the fall term of 2012, the number of applications accepted for the fall term of 2012, the number of first-time enrollees for the fall term of 2012, the total number of enrollees for the fall term of 2012, and the number of degrees awarded during the 2011/12 academic year (July 1, 2011 to June 30, 2012). Invitees were asked to provide enrollment data by gender, citizenship, race/ethnicity, and enrollment status, and degree data by gender, citizenship, and race/ethnicity. Invitees were not asked to provide applications data by student demographics since some institutions do not collect these data from applicants. Detailed explanations and descriptions of these data elements appear with the questionnaire in the Appendix.

## **Data Analysis**

Data were reviewed, cleaned, and edited using a process outlined by Van den Broeck, Argeseanu Cunningham, Eeckels, and Herbst (2005). The dataset was screened for instances where data were lacking, in excess, inconsistent, revealed strange patterns, or were otherwise suspect. Anomalies were recorded and diagnosed as being missing, erroneous, or seemingly extreme. Irregularities were addressed.

Certain definitions were adopted to facilitate the analysis and reporting of the survey data. The term “underrepresented minorities” refers to U.S. citizens and permanent residents identified as being Hispanic/Latino, American Indian/Alaska Native, or Black/African American. The term “institutional control” refers to the classification of institutions as public; private, not-for-profit; or private, for-profit institutions of higher education. The term “Carnegie classification” refers to the basic classification of the 2010 Carnegie Classification of Institutions of Higher Education. Institutions classified as research universities with very high research activity (RU/VH), research universities with high research activity (RU/H), and doctoral/research universities (DRU) are grouped as “doctoral institutions.” Master’s colleges and universities and specialized institutions are grouped in this report as “master’s-focused, specialized, or other institutions.” The term “enrollment status” refers to whether a student was enrolled primarily full-time or part-time. Institutions were instructed to apply their own definition of full-time and part-time enrollment status. Fields of study, as defined on [www.sciencemasters.com](http://www.sciencemasters.com) as of December 2012, were used to cluster programs within this report. Finally enrollment and degrees in the fields of energy/power, forensic sciences, nanoscience, and national defense were combined into the “other interdisciplinary sciences” category due to the small numbers of enrollments and degrees in these fields.

The analytical process and subsequent report required the suppression of some data. Data from PSM programs based outside of the United States were suppressed when examining enrollments and degrees by citizenship and race/ethnicity since these definitions differ outside the U.S. Data from non-U.S.-based programs were also suppressed when examining data by institutional control and Carnegie classification for the same reason.

## Limitations

This study has some limitations, the first of which has already been mentioned: some sets of data were necessarily suppressed for certain analyses. These suppressions were relatively small and they are disclosed throughout this report. One responding institution was particularly large and is likely to have skewed certain findings. Although this institution represented only 3% of all PSM programs, it constituted 11% of all first-time enrollees, 35% of total enrollees, and 25% of all degrees awarded. Speculations about what effects these data might have on the analyses are noted in this report, where applicable. Finally, this report likely understates the total number of applications to, applications accepted by, enrollments in, and degrees awarded by PSM programs, since the sample was restricted to PSM programs as of October 2012 (a figure that has grown since then) and since a small percentage of PSM programs did not respond to the survey.

Changes in PSM applications, enrollments, and degrees between 2010 and 2012 should also be interpreted with caution. Readers should note that overall comparisons between 2010 and 2012 included 147 programs that responded to at least one, but not all three of the surveys. Since the number of PSM programs has increased each year, some of the overall growth in PSM applications, enrollments, and degrees is simply a reflection of the growth in the number of PSM programs. The advantage of this method is that it portrays the overall status of the PSM initiative using the most comprehensive dataset available. The disadvantage in this approach is that year-to-year changes may be distorted due to years in which institutions did not provide data.

Comparisons were also made using PSM programs that participated in both the 2010, 2011 and 2012 *Professional Science Master's Enrollment and Degrees Surveys* (n=165) in order to restrict the comparisons to the identical set of institutions that responded to all three surveys. The advantage of this method is that it more accurately depicts changes among those PSM programs that responded to all three surveys. The disadvantage of this comparison is that it represents a subset of the full population of PSM programs (e.g., some PSM programs only started enrolling students in 2011 or in 2012, and not all PSM programs responded to all three of the surveys).

## Findings

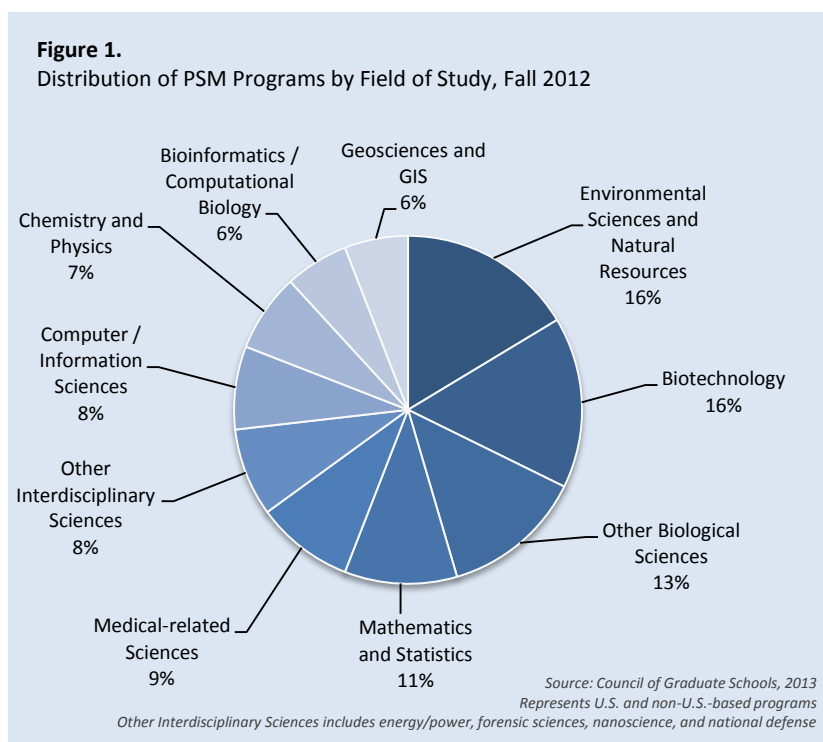
This report includes descriptive statistics regarding applications to, applications accepted for, enrollment in, and degrees awarded by PSM programs responding to the *2012 Professional Science Master's Enrollment and Degrees Survey*. This report also describes some of the changes in enrollments and degrees between 2010 and 2012.

### Characteristics of Survey Respondents

The *2012 Professional Science Master's Enrollment and Degrees Survey* generated 279 responses from 114 institutions of higher education. Of those, 248 programs from 107 institutions of higher education reported having students who were either enrolled in a PSM program in fall 2012 or graduated from a PSM program during the 2011/12 academic year (July 1, 2011 to June 30, 2012). The responses from these 248 programs serve as the basis for the analysis and this report.

The vast majority (98%, or 243) of the 248 PSM programs with students were from institutions located in the United States. Among these U.S.-based programs, just over three-quarters (78%) were in public institutions, and just over one-fifth (22%) were in private, not-for-profit institutions. By basic Carnegie classification, two-thirds (67%) were located in doctoral institutions, and one-third (33%) were located in master's-focused, specialized, or other institutions.

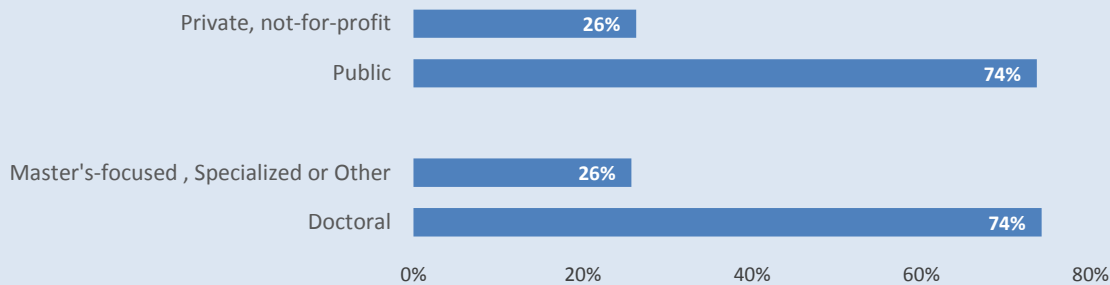
PSM programs responding to the survey were grouped into ten fields of study. The biological sciences (including biotechnology, bioinformatics/computational biology, other biological sciences, and medical-related sciences) comprised 44% of all PSM programs. The six remaining fields comprised 56% of all PSM programs. Figure 1 depicts the distribution of programs by field of study.



## Applications Received

Institutions responding to the *2012 Professional Science Master's Enrollment and Degrees Survey* received 6,181 applications for admission to PSM programs for the fall term of 2012. Three-quarters (74%) of all applications were received by public institutions, and 26% were received by private, not-for-profit institutions (see Figure 2). Three-quarters of (74%) applications were received by doctoral institutions, and 26% were received by master's-focused, specialized, or other institutions.

**Figure 2.**  
Applications Received by PSM Programs by Institutional Control and Carnegie Classification, Fall 2012

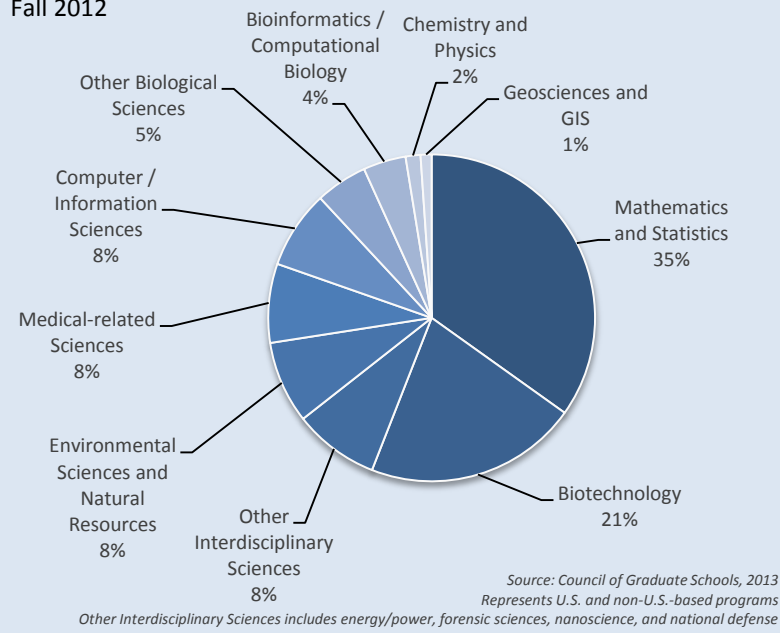


Source: Council of Graduate Schools, 2013  
Represents only U.S.-based programs

As shown in Figure 3, PSM programs in mathematics and statistics received more applications than programs in other fields of study, constituting 35% of all applications received for fall 2012. This finding was influenced by two programs that received 33% of all applications to PSM mathematics and statistics programs for the fall 2012. PSM programs in biotechnology generated the second largest number of applications (21%) followed by computer/information sciences, medical-related sciences, environmental sciences and natural resources, and other interdisciplinary sciences, each comprising 8% of all applications received for fall 2012



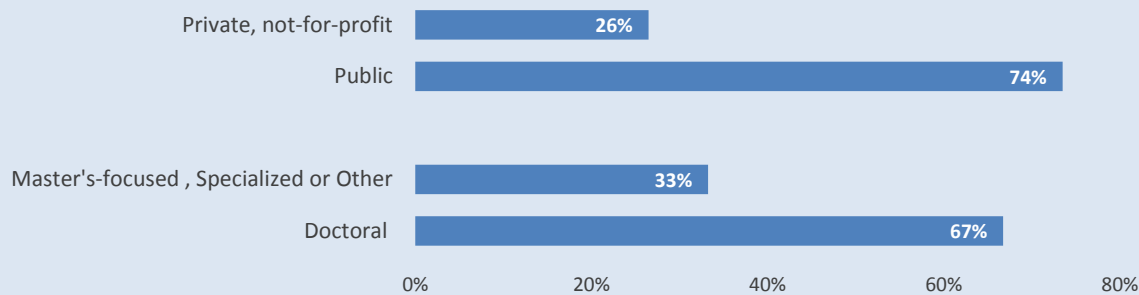
**Figure 3.**  
Applications Received by PSM Programs by Field of Study,  
Fall 2012



### Applications Accepted

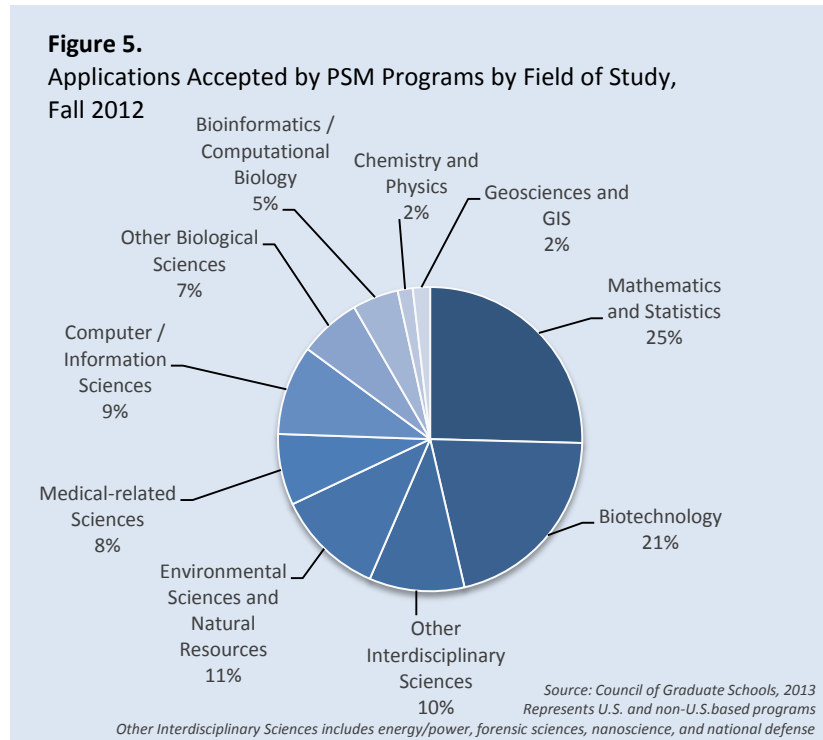
Respondents to the *2012 Professional Science Master's Enrollment and Degrees Survey* reported that 2,944 applications were accepted for the fall term of 2012. Among U.S.-based PSM programs, three-quarters (74%) of the applications accepted were for admission to public institutions and 26% were for admission to private, not-for-profit institutions. Two-thirds (67%) of PSM applications accepted were for admission to doctoral institutions, and one-third (33%) were for admission to master's-focused, specialized, or other institutions (see Figure 4).

**Figure 4.**  
Applications Accepted by PSM Programs by Institutional Control and Carnegie Classification, Fall 2012



Source: Council of Graduate Schools, 2013  
Represents only U.S.-based programs

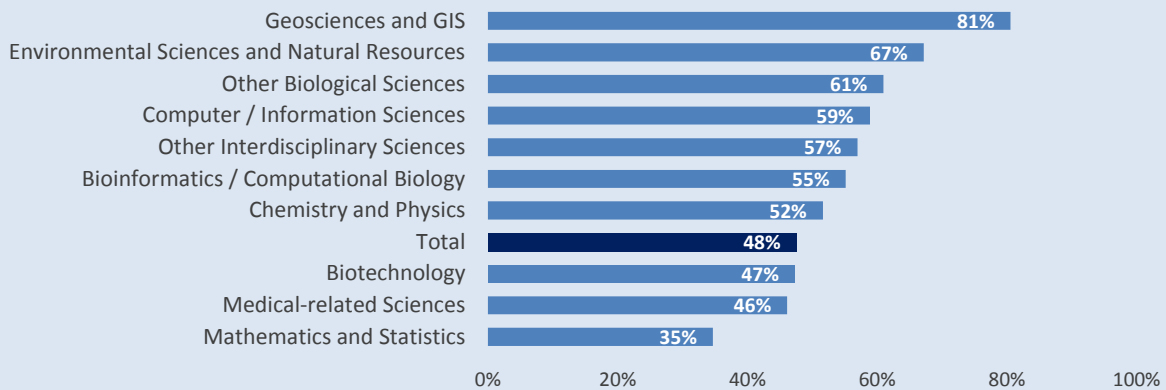
As depicted in Figure 5, mathematics and statistics programs accounted for the largest percentage of accepted applications among the ten fields of study (25%), followed by biotechnology (21%). It should be noted that two mathematics and statistics programs accepted 35% of all applications for this specific PSM field for fall 2012. Environmental science and natural resources, and other interdisciplinary sciences accounted for 11% and 10% of all accepted applications, respectively.



The overall acceptance rate for the PSM programs responding to the *2012 Professional Science Master's Enrollment and Degrees Survey* was 48%, meaning that nearly one-half of all applications received were accepted for admission to PSM programs. Among U.S.-based programs, the acceptance rate was 47% at both public institutions and at private, not-for-profit institutions. The acceptance rate was 42% at doctoral institutions, and 61% at master's-focused, specialized, or other institutions based in the United States.

As illustrated in Figure 6, the majority of application acceptance rates by field of study were higher than the overall average of 48%. Geosciences and GIS had a particularly high acceptance rate (81%), while mathematics and statistics had a particularly low acceptance rate (35%). This low acceptance rate is due to the two programs that received particularly large numbers of applications, but accepted one-third or less of these applications.

**Figure 6.**  
Acceptance Rates in PSM Programs by Field of Study, Fall 2012

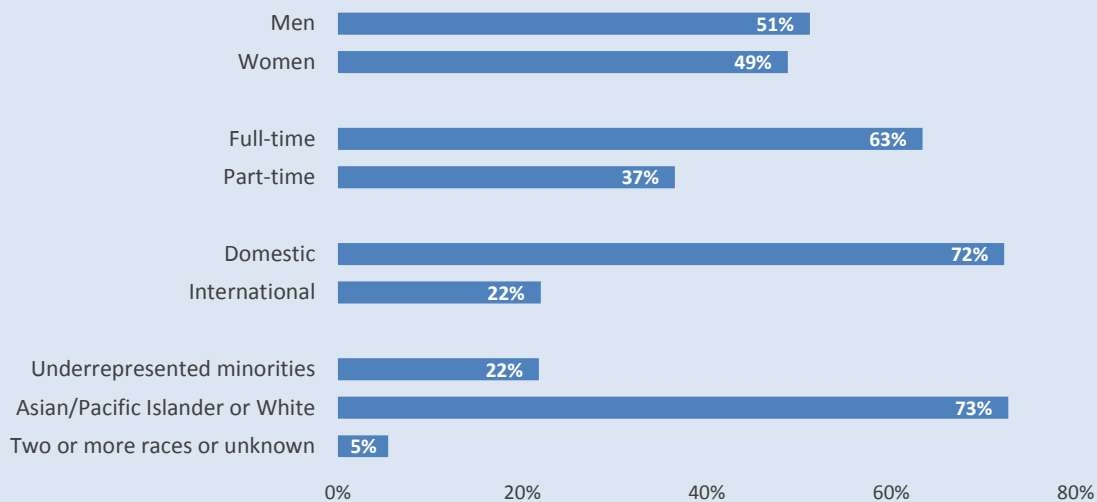


Source: Council of Graduate Schools, 2013  
Represents U.S. and non-U.S.-based programs  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

## First-Time Enrollment

Respondents to the *2012 Professional Science Master's Enrollment and Degrees Survey* reported that 1,884 students enrolled for the first time in a PSM program in fall 2012, the majority of whom (1,775) were enrolled in programs based in the United States. Among U.S. and non-U.S.-based PSM programs, slightly more than one-half (51%) of all first-time students were men, and slightly less than one-half (49%) were women. Among this same population, nearly two-thirds (63%) of all first-time students were enrolled full-time, and just over one-third (37%) were enrolled part-time. Slightly more than one-fifth (22%) of first-time enrollees in U.S.-based PSM programs were temporary residents (i.e., international students). Among U.S. citizens and permanent residents who were enrolled for the first-time in a PSM program in fall 2012, 22% were underrepresented minorities (Hispanic/Latino, American Indian/Alaska Native, or Black/African American). Roughly three-quarters (73%) were Asian/Pacific Islander or White, and 5% were either of two or more races or their race/ethnicity was unknown. These characteristics are summarized in Figure 7.

**Figure 7.**  
 Characteristics of First-Time Enrollees in PSM Programs, Fall 2012



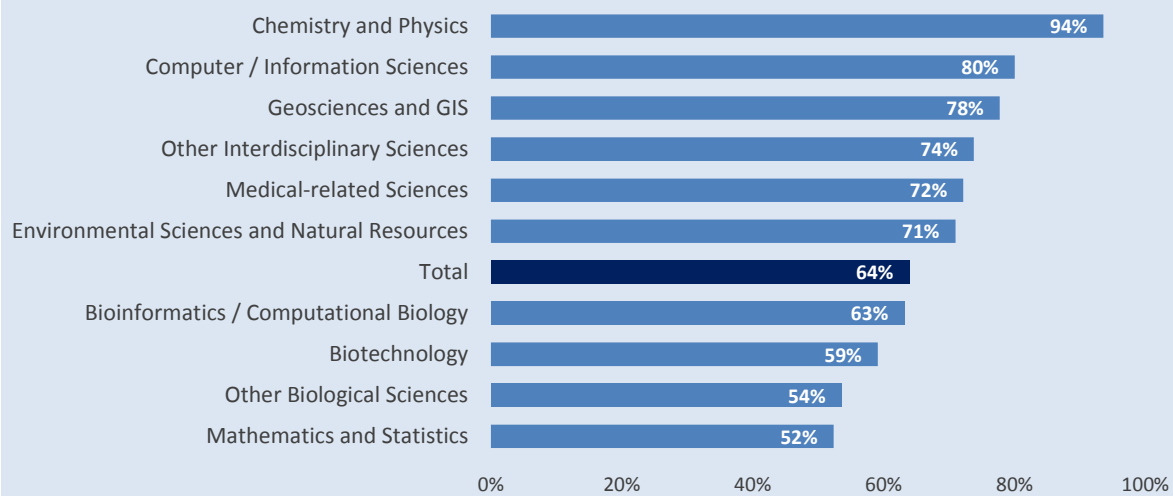
*Source: Council of Graduate Schools, 2013*  
 Gender and enrollment status calculations based upon U.S. and non-U.S.-based programs  
 Citizenship calculations based upon only U.S.-based programs  
 Race/ethnicity calculations based upon only U.S. citizens and permanent residents enrolled in U.S.-based programs

### Yield Rates

The overall yield rate, which is the number of first-time enrollees divided by the number of applications accepted, was 64% across all PSM programs. The yield rate for U.S.-based public institutions (68%) was higher than the yield rate for private, not-for-profit institutions (47%). The yield rate was also higher at master’s-focused, specialized, or other institutions (61%) than at doctoral institutions (42%).

Yield rates varied by field of study. Respondents to the survey representing PSM programs in chemistry and physics, computer/information sciences, and geosciences and GIS reported high yield rates, at 94%, 80%, and 78%, respectively. Mathematics and statistics PSM programs reported the lowest yield rate at 52% (see Figure 8).

**Figure 8.**  
Yield Rates in PSM Programs by Field of Study, Fall 2012



Source: Council of Graduate Schools, 2013  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

### First-Time Enrollment by Institutional Control

Four out of five (80%) first-time students in U.S.-based PSM programs were enrolled in a public institution in fall 2012, and roughly one-fifth (20%) were enrolled in a private, not-for-profit institution. More than one-half of first-time students enrolled in public institutions were men (53%), and 47% were women. Among first-time enrollees in private, not-for-profit institutions, only 46% were men, and just over one-half were women (54%). Three-quarters (76%) of first-time enrollees at private, not-for-profit institutions were enrolled full-time compared to just over one-half (59%) of first-time enrollees at public institutions. Nearly one-third (31%) of first-time enrollees in U.S.-based private, not-for-profit institutions were temporary residents (i.e., international students), compared with 20% in public institutions.

Among U.S. citizens and permanent residents in U.S.-based public institutions, 24% of first-time enrollees were underrepresented minorities, 71% were Asian/Pacific Islander or White, and 5% were either of two or more races or their race/ethnicity was unknown. By contrast, 9% of first-time enrollees in U.S.-based private, not-for-profit institutions were underrepresented minorities, 82% were Asian/Pacific Islander or White, and 10% were either of two or more races or their race/ethnicity was unknown.

## **First-Time Enrollment by Carnegie Classification**

By basic Carnegie classification, 61% of first-time enrollees in U.S.-based PSM programs were enrolled in doctoral institutions in fall 2012, and 39% were enrolled in master's-focused, specialized, or other institutions. First-time enrollees in PSM programs at U.S.-based doctoral institutions were evenly split between men and women. The gender distribution of first-time enrollment in PSM programs at U.S.-based master's-focused, specialized, or other institutions was similar; 53% were men, and 47% were women.

First-time enrollees in U.S.-based doctoral institutions were more likely than first-time enrollees in master's-focused, specialized, or other institutions to be enrolled full-time. Nearly three-quarters (73%) of first-time students at doctoral institutions were enrolled full-time, compared to nearly one-half (45%) of first-time students at master's-focused, specialized, or other institutions. U.S.-based doctoral institutions responding to the survey reported that 30% of their first-time enrollees were temporary residents compared with 10% of first-time enrollees at master's-focused, specialized, or other institutions.

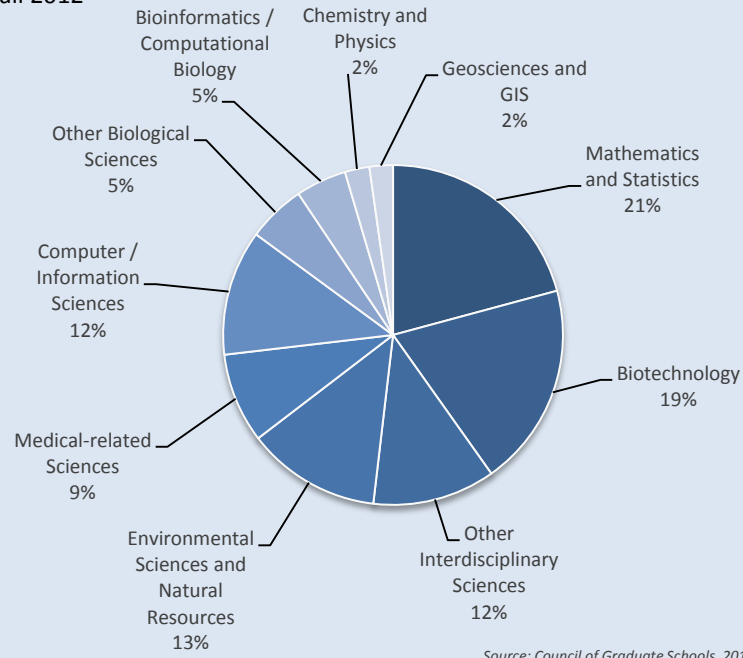
Master's-focused, specialized, or other institutions enrolled more first-time students who were underrepresented minorities than did doctoral institutions. Just over one-quarter (28%) of U.S. citizens and permanent residents at U.S.-based master's-focused, specialized, or other institutions were underrepresented minorities compared to nearly one-fifth (17%) at doctoral institutions. Over three-quarters of first-time (76%) enrollees at doctoral institutions and two-thirds (68%) at master's-focused, specialized, or other institutions were Asian/Pacific Islander or White. Less than one in ten (6%) first-time students enrolled in PSM programs at doctoral institutions were either of two or more races or their race/ethnicity was unknown compared to 4% of first-time enrollees in master's-focused, specialized, or other institutions.

## **First-Time Enrollment by Field of Study**

The four largest fields of study with respect to first-time enrollments were mathematics and statistics (21%), biotechnology (19%), environmental sciences and natural resources (13%), and other interdisciplinary sciences (12%). These four fields of study constituted 65% of all first-time enrollees in PSM programs in fall 2012. As shown in Figure 9, first-time enrollment was smallest in chemistry and physics, and in geosciences and GIS fields.

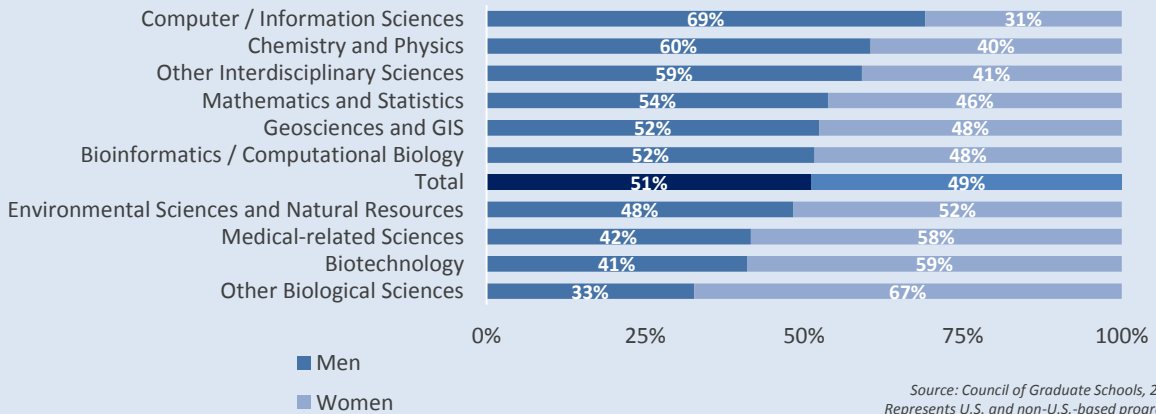
The majority of first-time students enrolled in the fields of computer/information sciences, chemistry and physics, other interdisciplinary sciences, mathematics and statistics, geosciences and GIS, and bioinformatics/computational biology were men, representing 69%, 60%, 59%, 54%, 52%, and 52% of all first-time enrollees, respectively. As shown in Figure 10, PSM programs in other biological sciences, biotechnology, medical-related sciences, and environmental sciences and natural resources enrolled more first-time students who were women than men, with 67%, 59%, 58%, and 52%, respectively.

**Figure 9.**  
First-Time Enrollment in PSM Programs by Field of Study,  
Fall 2012



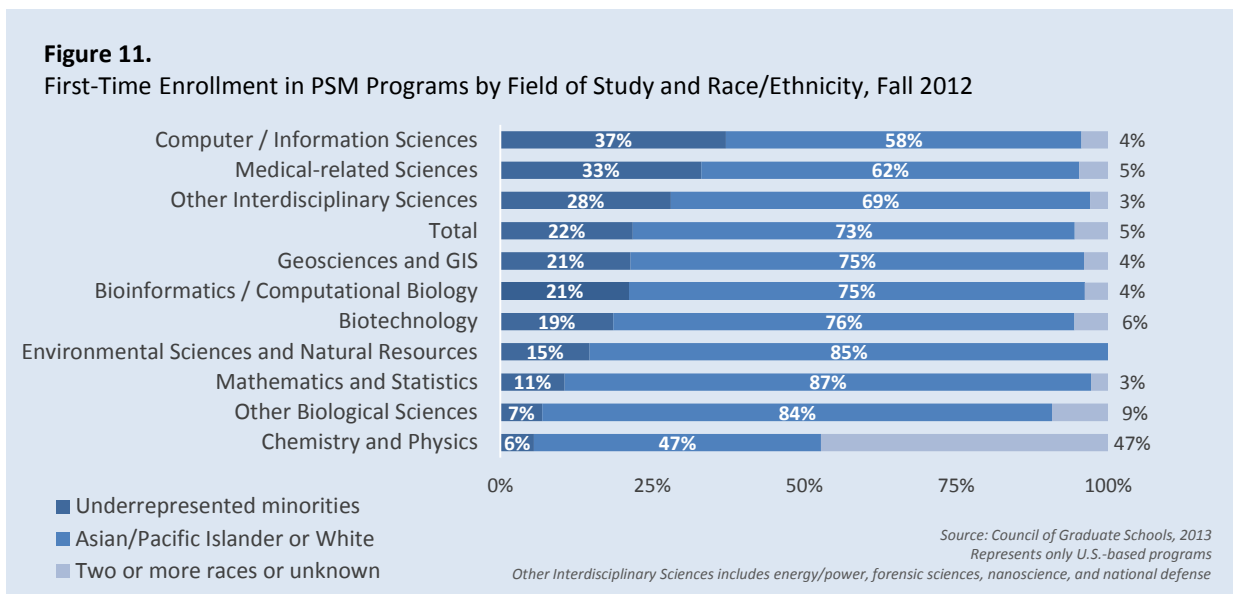
Source: Council of Graduate Schools, 2013  
Represents U.S. and non-U.S.-based programs  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

**Figure 10.**  
First-Time Enrollment in PSM Programs by Field of Study and Gender, Fall 2012



Source: Council of Graduate Schools, 2013  
Represents U.S. and non-U.S.-based programs  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

PSM programs responding to the survey reported variances in race/ethnicity by field of study. As shown in Figure 11, PSM programs in computer/information sciences (37%), medical-related sciences (33%), and other interdisciplinary sciences (28%) had higher percentages of U.S. citizen and permanent resident underrepresented minority first-time enrollees than the overall average (22%) for all U.S.-based PSM programs responding to the survey.



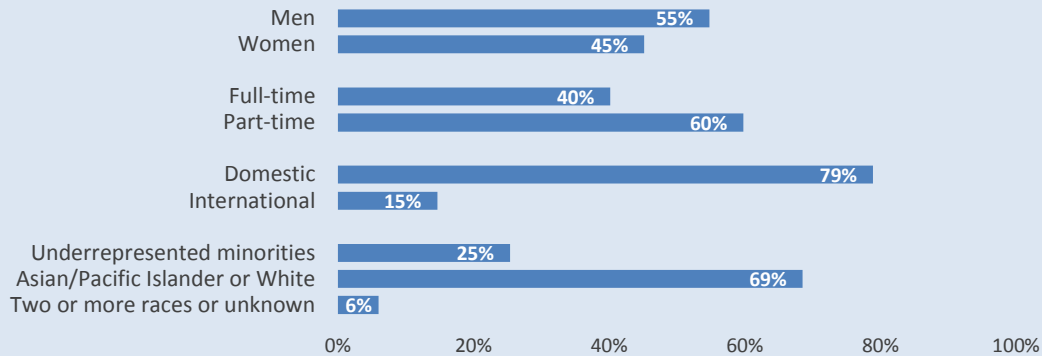
## Total Enrollment

Institutions responding to the *2012 Professional Science Master's Enrollment and Degrees Survey* reported a total of 5,804 students enrolled in PSM programs in fall 2012, 5,629 of whom were enrolled at institutions of higher education based in the United States (see Figure 12). More than one-half (55%) of total enrollees in PSM programs were men, and slightly less than one-half (45%) were women. Nearly three of every five (60%) PSM students were enrolled part-time, compared to two of every five (40%) who were enrolled full-time. Such a large percentage of part-time students is likely due to a single institution, which represents only 3% of all PSM programs, but 33% of total enrollment. At U.S.-based institutions, 15% of all enrollees in U.S.-based PSM programs were temporary residents. Among U.S. citizens and permanent residents, 25% of enrollees in fall 2012 were underrepresented minorities, 69% were Asian/Pacific Islander or White, and 6% were either of two or more races or their race/ethnicity was unknown.



**Figure 12.**

**Characteristics of Total Enrollees in PSM Programs, Fall 2012**



*Source: Council of Graduate Schools, 2013  
Gender and enrollment status calculations based upon U.S. and non-U.S.-based programs  
Citizenship calculations based upon U.S.-based programs only  
Race/ethnicity calculations based upon only U.S. citizens and permanent residents enrolled in U.S.-based programs*

### Total Enrollment by Institutional Control

The majority (83%) of students enrolled in U.S.-based PSM programs were enrolled in public institutions, and 17% were enrolled in private, not-for-profit institutions, according to the survey respondents. Women represented 44% of total enrollments in public institutions (compared to 57% men) and 54% of total enrollments in private, not-for-profit institutions (compared to 46% men).

There were differences between public and private, not-for-profit institutions with respect to enrollment status. One-third (36%) of students in U.S.-based public institutions were enrolled full-time, while two-thirds (64%) were enrolled part-time. The enrollment status of students in private, not-for-profit institutions was more evenly distributed: 55% of students were enrolled full-time, and 45% were enrolled part-time.

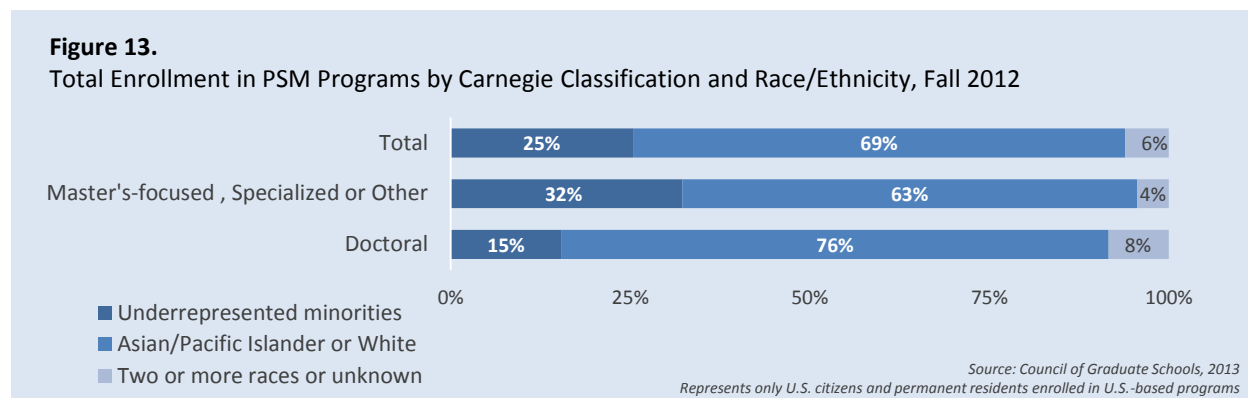
As a percentage of total enrollment, temporary residents comprised a larger share of students at private, not-for-profit institutions than at public institutions in fall 2012. One-quarter (26%) of enrollees at private, not-for-profit institutions were international students compared to 12% at public institutions. Among U.S. citizens and permanent residents, 28% of enrollees in public institutions were underrepresented minorities, while 67% were Asian/Pacific Islander or White, and 5% were either of two or more races or their race/ethnicity was unknown. By contrast, 11% of enrollees in private, not-for-profit institutions were underrepresented minorities, 79% were Asian/Pacific Islander or White, and 10% were either of two or more races or their race/ethnicity was unknown.

### Total Enrollment by Carnegie Classification

By Carnegie classification, 55% of PSM students in U.S.-based institutions were enrolled in master's-focused, specialized, or other institutions, and 45% were enrolled in doctoral institutions. Men constituted 54% of enrollees at doctoral institutions, and women constituted 46%. Men constituted

56% of enrollees at master’s-focused, specialized, or other institutions, and women 44%. Nearly four in every five (78%) PSM enrollees in U.S.-based master’s-focused, specialized, or other institutions were enrolled part-time in fall 2012, and one in every five (22%) were enrolled full-time. Again, this result is at least partly due to a single institution that represented over one-third (34%) of total enrollment in PSM programs. By contrast, just over one-third (41%) of PSM students enrolled in U.S.-based doctoral institutions attended part-time, compared to 59% who were enrolled full-time.

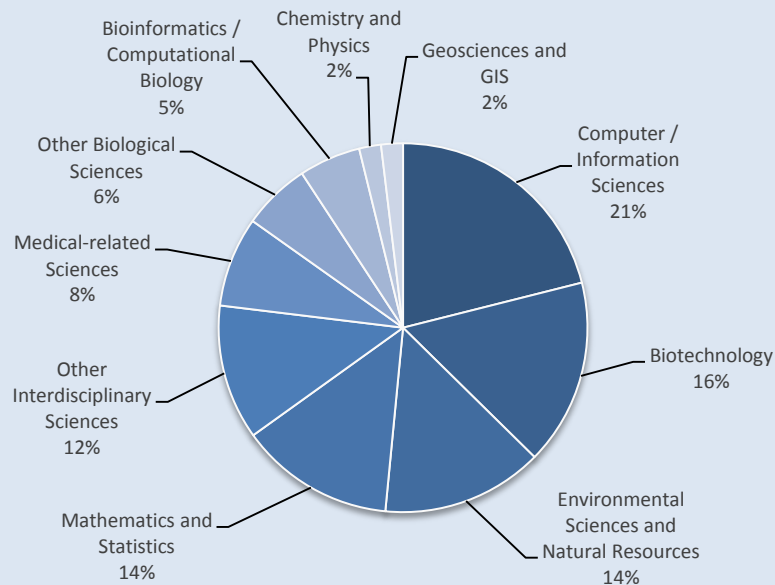
As a percentage of total enrollment, temporary residents comprised a larger share of students at doctoral institutions than at master’s-focused, specialized, or other institutions. Slightly more than one-quarter (26%) of the enrollees at doctoral institutions were international students compared to 5% at master’s-focused, specialized, or other institutions. Master’s-focused, specialized, or other institutions enrolled a larger percentage of underrepresented minorities than doctoral institutions. As shown in Figure 13, one-third (32%) of U.S. citizens and permanent residents at U.S.-based master’s-focused, specialized, or other institutions were underrepresented minorities compared to 15% at U.S.-based doctoral institutions. Asian/Pacific Islander and White students constituted 63% of total enrollment at master’s-focused, specialized, or other institutions, and 76% of total enrollments at doctoral institutions.



### Total Enrollment by Field of Study

Total PSM enrollment in fall 2012, as reported by all survey respondents, was dominated by four fields of study. More than three-quarters of all PSM students were pursuing degrees in computer/information sciences (21%), biotechnology (16%), environmental sciences and natural resources (14%), or mathematics and statistics (14%). Total enrollment in the six remaining fields of comprised two-thirds (35%) of total PSM enrollment in fall 2012 (see Figure 14).

**Figure 14.**  
Total Enrollment in PSM Programs by Field of Study, Fall 2012



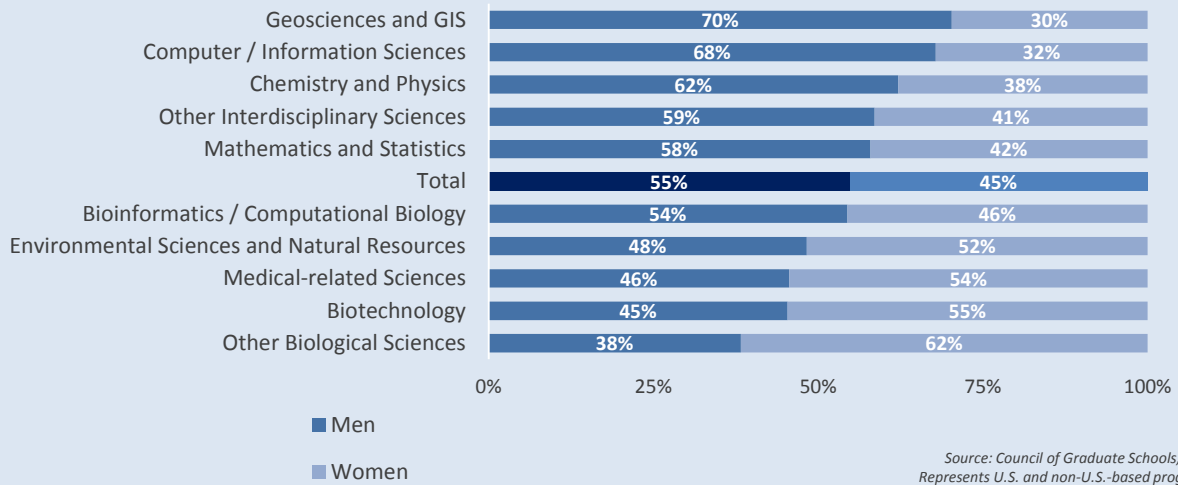
Source: Council of Graduate Schools, 2013  
Represents U.S. and non-U.S.-based programs  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

Total enrollment in geosciences and GIS, computer/information sciences, chemistry and physics, other interdisciplinary sciences, mathematics and statistics, and bioinformatics/computational biology contained more men than women (see Figure 15), with 70%, 68%, 62%, 59%, 58%, and 54%, respectively. By comparison, enrollments in other biological sciences, biotechnology, and medical-related sciences were more heavily composed of women, with 62%, 55%, and 54%, respectively. Total enrollment in environmental sciences and natural resources was more evenly divided between men (48%) and women (52%).

PSM programs in computer/information sciences, environmental sciences and natural resources, other interdisciplinary sciences, other biological sciences, and medical-related sciences had large percentages of part-time students: 88%, 68%, 67%, 65%, and 65%, respectively. PSM programs in mathematics and statistics and biotechnology had larger percentages of students who were enrolled full-time: 73% and 60%, respectively. Total enrollment in bioinformatics/computational biology and in chemistry and physics PSM programs were divided fairly evenly between full-time and part-time, with 52% and 53% of enrollees being full-time and 48% and 47% of enrollees being part-time, respectively.

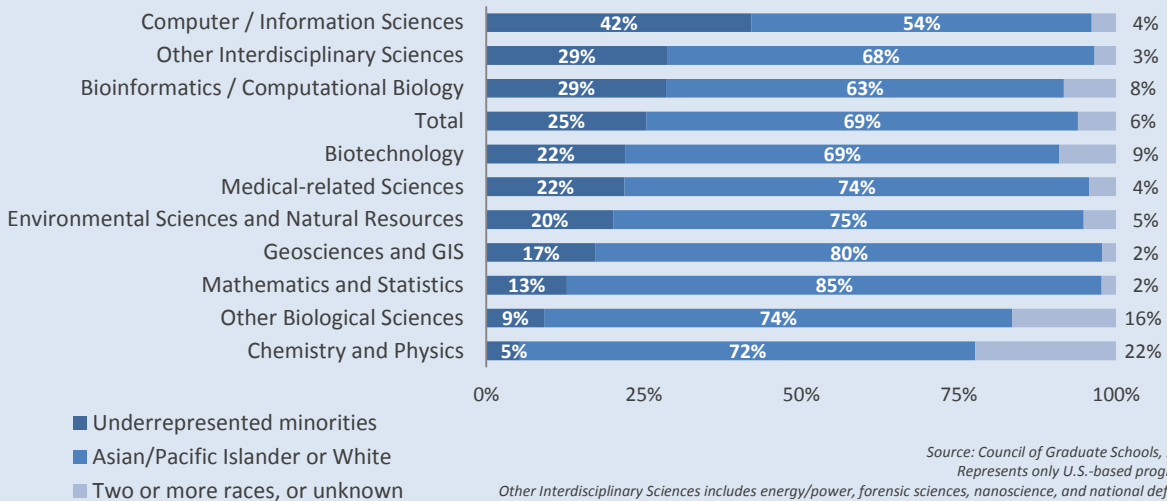
Temporary residents were most likely to be enrolled in two PSM programs: mathematics and statistics or biotechnology. Over one-third (36%) and one-quarter (25%) of all temporary residents were enrolled in programs within these two fields respectively in fall 2012. U.S. citizens and permanent residents were more likely to be enrolled in computer/information sciences, environmental science and natural resources, and biotechnology programs, at 23%, 15%, and 14%, respectively.

**Figure 15.**  
Total Enrollment in PSM Programs by Field of Study and Gender, Fall 2012



As shown in Figure 16, PSM programs in computer/information sciences, other interdisciplinary sciences, and bioinformatics/computational biology had higher percentages of underrepresented minority enrollees who were U.S. citizens or permanent residents than the overall average (25%), with 42%, 29%, and 29% respectively.

**Figure 16.**  
Total Enrollment in PSM Programs by Field of Study and Race/Ethnicity, Fall 2012

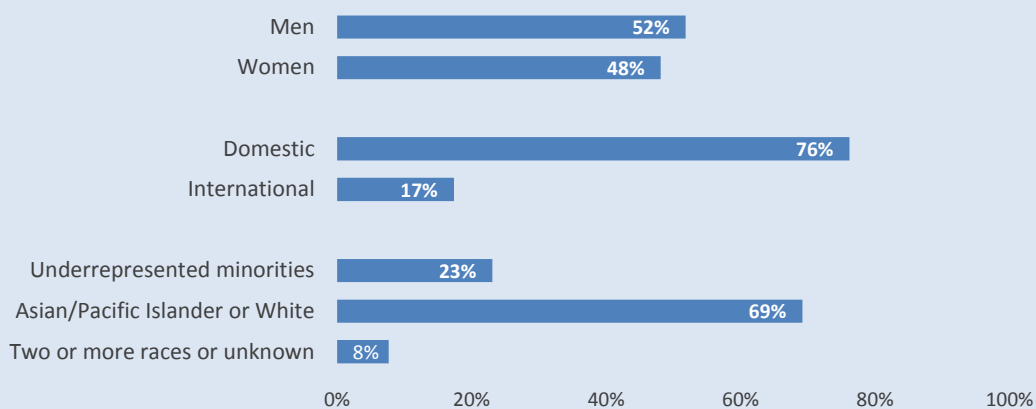


## Degrees

Institutions responding to the *2012 Professional Science Master's Enrollment and Degrees Survey* awarded 1,754 degrees in academic year 2011/12 (July 1, 2011 to June 30, 2012), the vast majority (1,691) of which were granted by U.S.-based institutions. Just over one-half (52%) of the 1,754 degrees were awarded to men, while 48% were awarded to women. Roughly one in five (17%) graduates of U.S.-based PSM programs were temporary residents. Among U.S. citizens and permanent residents, 23% of PSM graduates in 2011/12 were underrepresented minorities, just over two-thirds (69%) were Asian/Pacific Islander or White, and 8% were either of two or more races or their race/ethnicity was unknown. A summary of these characteristics appears in Figure 17.

**Figure 17.**

Characteristics of PSM Degrees Awarded, 2011/12



Source: Council of Graduate Schools, 2013  
Gender calculations based upon U.S. and non-U.S.-based programs  
Citizenship calculations based upon only U.S.-based programs

Race/ethnicity calculations based upon only degrees awarded to U.S. citizens and permanent residents by U.S.-based programs

## Degrees by Institutional Control

Among U.S.-based PSM programs responding to the survey, four in five (82%) degrees were earned from a public institution, and one in five (18%) were earned from a private, not-for-profit institution. Nearly one-half (49%) of degrees awarded by U.S.-based public institutions were awarded to men, and 51% to women. Less than one-half (45%) of degrees awarded by U.S.-based private, not-for-profit institutions were awarded to men, compared to 55% awarded to women.

Over one-third (39%) of all graduates who earned their PSM degree from a U.S.-based private, not-for-profit institution were temporary residents, and 13% of all graduates who earned their degree from a public institution were temporary residents. When compared with U.S. citizens and permanent residents, temporary residents were less likely to have earned their degree from a public institution. Six out of ten (60%) temporary resident PSM graduates earned their degree from a public institution compared to nearly nine out of ten (88%) U.S. citizen and permanent resident PSM graduates.

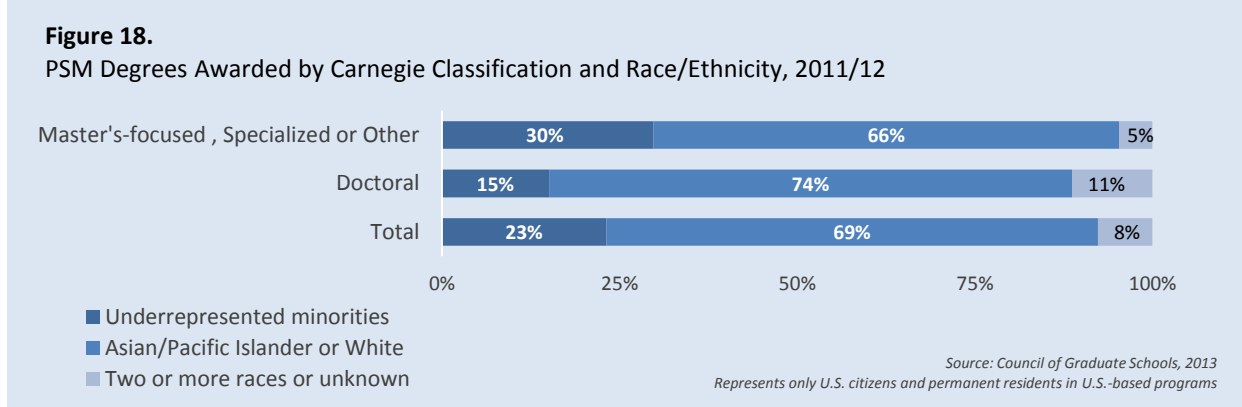
Among U.S. citizens and permanent residents who earned a degree from a public institution in the 2011/12 academic year, 25% were underrepresented minorities, 68% were Asian/Pacific Islander or White, and 8% were either of two or more races or their race/ethnicity was unknown.

Underrepresented minorities constituted a smaller percentage (8%) of graduates of private, not-for-profit institutions. Nearly four in five (79%) private, not-for-profit graduates were Asian/Pacific Islander or White, and 13% were either of two or more races or their race/ethnicity was unknown.

### Degrees by Carnegie Classification

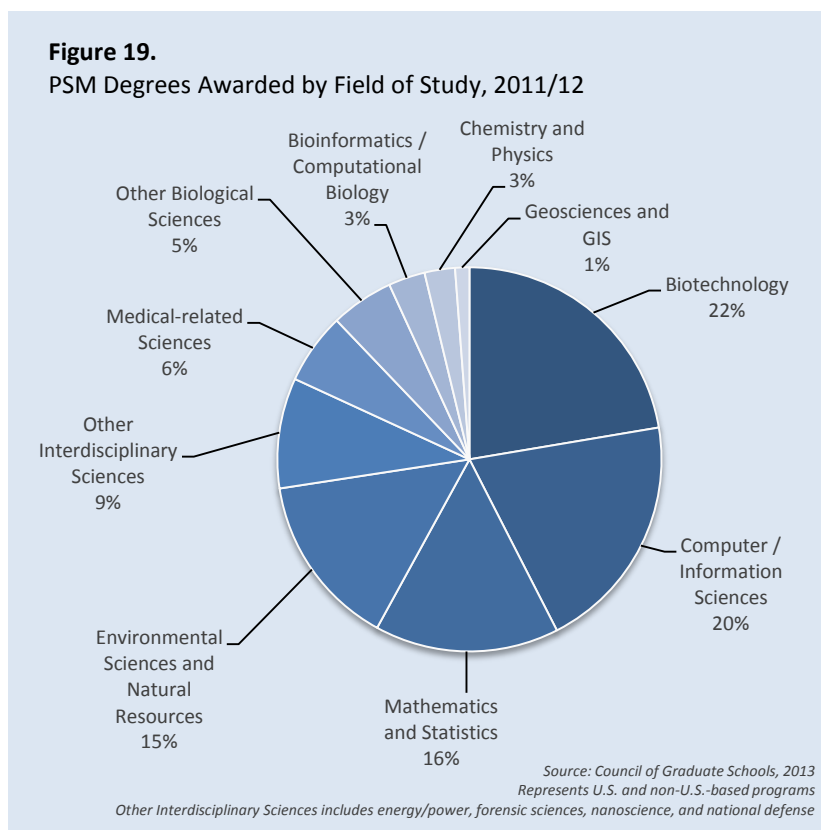
By Carnegie classification, and among U.S.-based institutions, one-half (51%) of PSM degrees were awarded by master’s-focused, specialized, or other institutions in 2011/12, and one-half (49%) were awarded by doctoral institutions. Nearly one-half (49%) of PSM degrees awarded by U.S.-based doctoral institutions were awarded to men, whereas 51% were awarded to women. Similarly, 48% of all PSM degrees awarded by master’s-focused, specialized, or other institutions were awarded to men in 2011/12, compared to 52% awarded to women.

Master’s-focused, specialized, or other institutions awarded a larger percentage of degrees to underrepresented minorities than doctoral institutions (see Figure 18). Nearly one-third (30%) of PSM degrees awarded by master’s-focused, specialized, or other institutions to U.S. citizens and permanent residents in the 2011/12 academic year were awarded to underrepresented minorities, two-thirds (66%) of PSM degrees were awarded to Asian/Pacific Islander or White graduates, and 5% were awarded to individuals who were either of two or more races or whose race/ethnicity was unknown. By contrast, 15% of PSM degrees awarded by U.S.-based doctoral institutions to U.S. citizens and permanent residents in the 2011/12 academic year were awarded to underrepresented minorities, 74% to Asian/Pacific Islander or White graduates, and 11% to individuals who were either of two or more races or whose race/ethnicity was unknown.



## Degrees by Field of Study

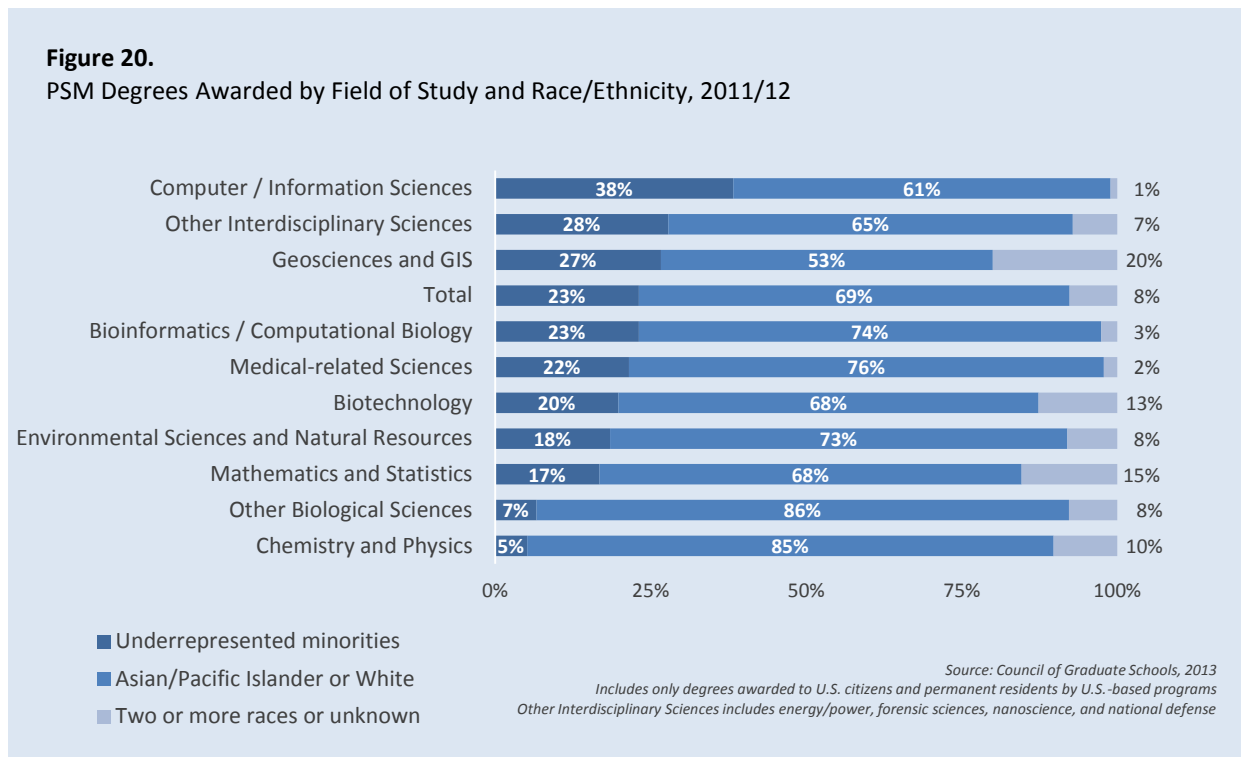
By field of study, biotechnology and computer/information sciences comprised the largest number of PSM degrees awarded in 2011/12. As shown in Figure 19, these two fields combined awarded 42% of all PSM degrees awarded that academic year: 22% and 20%, respectively. Mathematics and statistics and environmental sciences and natural resources collectively awarded nearly one-third of all degrees in 2011/12: 16% and 15%, respectively.



Men earned the majority of the PSM degrees awarded in chemistry and physics, geosciences and GIS, other interdisciplinary sciences, bioinformatics/computational biology, and mathematics and statistics, at 73%, 70%, 58%, 56%, and 54%, respectively. Women earned a higher percentage of degrees than men in medical-related sciences, other biological sciences, computer/information sciences, and environmental sciences and natural resources, at 71%, 61%, 56%, and 55%, respectively.

Temporary residents were more likely than U.S. citizens and permanent residents to earn PSM degrees in the fields of mathematics and statistics, and biotechnology. These two categories accounted for three-quarters (74%) of all PSM degrees earned by temporary residents in U.S.-based institutions in 2011/12. U.S. citizens and permanent residents were more likely to earn PSM degrees in the fields of computer/information sciences, biotechnology, and environmental sciences and natural resources; 22%, 18%, and 16%, respectively.

As shown in Figure 20, the field of study in which the largest percentage of underrepresented minorities earned a degree in 2011/12 was computer/information sciences (38%), followed by other interdisciplinary sciences and geosciences and GIS (28% and 27%, respectively). One-fifth (20%) of the PSM degrees reported in geosciences and GIS were earned by individuals who are of two or more races or whose race/ethnicity is unknown.



## Changes from 2010 to 2012

Data from the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* represent a very comprehensive picture of trends in PSM applications, enrollments, and degrees since response rates were 89%, 95% and 93%. However, because the number of PSM programs are increasing and the size of PSM programs is varied, it is necessary to portray changes over the 2010 to 2012 period in two separate ways in order to capture both the changes in the overall PSM initiative and in the subset of programs that have responded to all three of the *Professional Science Master's Enrollment and Degrees Surveys*.

First, comparisons were made using all respondents to these surveys to show changes in the overall PSM initiative between 2010 and 2012. The advantage of this method is that it portrays the overall status of the PSM initiative using the most comprehensive dataset available. The disadvantage of this approach is that year-to-year changes may be distorted due to years in which institutions did not provide data.



The second comparison used only programs that responded to the 2010, 2011, *and* the 2012 *Professional Science Master's Enrollment and Degrees Surveys* (n=165) in order to restrict the comparisons to the identical set of institutions that responded to all three surveys. The advantage of this method is that it more accurately depicts changes among those PSM programs that responded to all three surveys. The disadvantage of this comparison is that it represents a subset of the full population of PSM programs (e.g., some PSM programs only started enrolling students in 2011 or in 2012, and not all PSM programs responded to all three of the surveys).

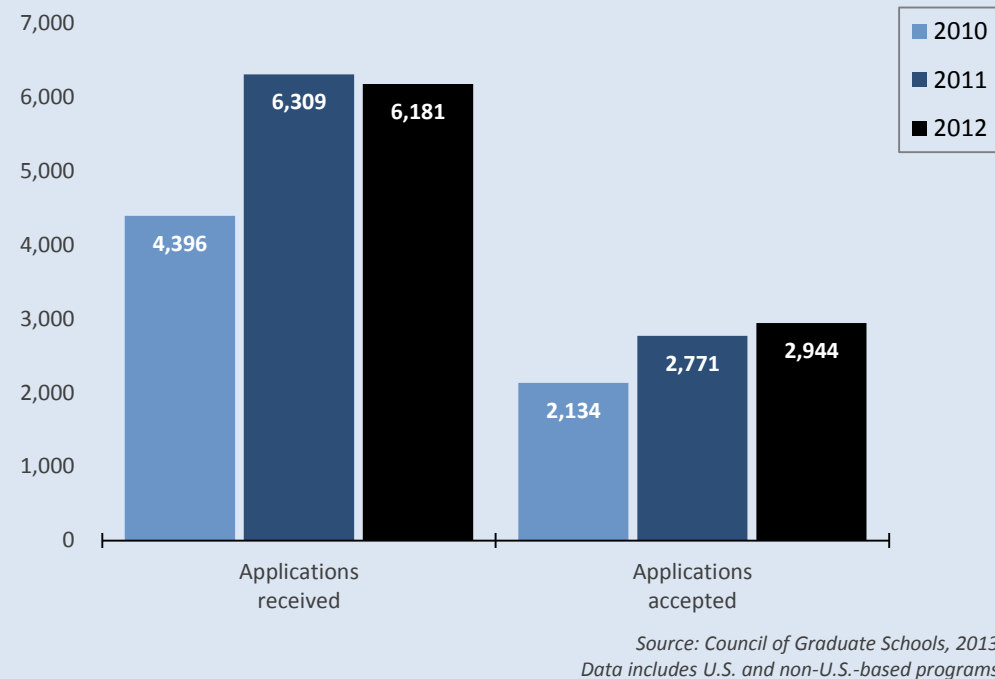
### **Comparisons Using All Respondents**

This first set of comparisons uses data from all respondents to the 2010, 2011, *and* 2012 *Professional Science Master's Enrollment and Degrees Surveys*. This set of comparisons is intended to show changes in the overall PSM initiative between 2010 and 2012. The number of programs providing data for the surveys increased from 209 PSM programs in 2010 to 230 in 2011, to 279 in 2012.

### **Applications**

Overall, respondents to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 41% increase in applications received between 2010 and 2012, from 4,396 applications received for fall 2010 to 6,181 applications received for fall 2012 (see Figure 21). The majority of the increase in applications received occurred between 2010 and 2011 (44% increase) and was followed by a slight decrease (-2%) between 2011 and 2012. The number of applications accepted increased markedly by 38%, from 2,134 in 2010 to 2,944 in 2012, with the majority of the increase occurring between 2010 and 2011 (30%) followed by a small (6%) increase between 2011 and 2012. The sizeable gains in applications received can be largely attributed to one program at one institution that only participated in the 2011 survey but not the 2010 or 2012 survey. This program accounted for nearly one-half (45%) of the gain in applications received and nearly one-third (29%) of the gain in applications accepted between 2010 and 2011.

**Figure 21.**  
Change in Applications Received and Applications Accepted  
Among All Respondents, Fall 2010 to Fall 2012



### First-Time Enrollment

As depicted in Figure 22, respondents to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 28% increase in first-time enrollment, from 1,471 in 2010 to 1,884 in 2012. The increase in first-time enrollments was slightly higher (15%) between 2010 and 2011 than between 2011 and 2012 (12%) as first-time enrollments increased from 1,471 in 2010 to 1,687 in 2011, to 1,884 in 2012. The yield rate, which is the number of first-time enrollees divided by the number of applications accepted, dropped from 69% in 2010 to 61% in 2011, and then increased to 64% in 2012<sup>1</sup>.

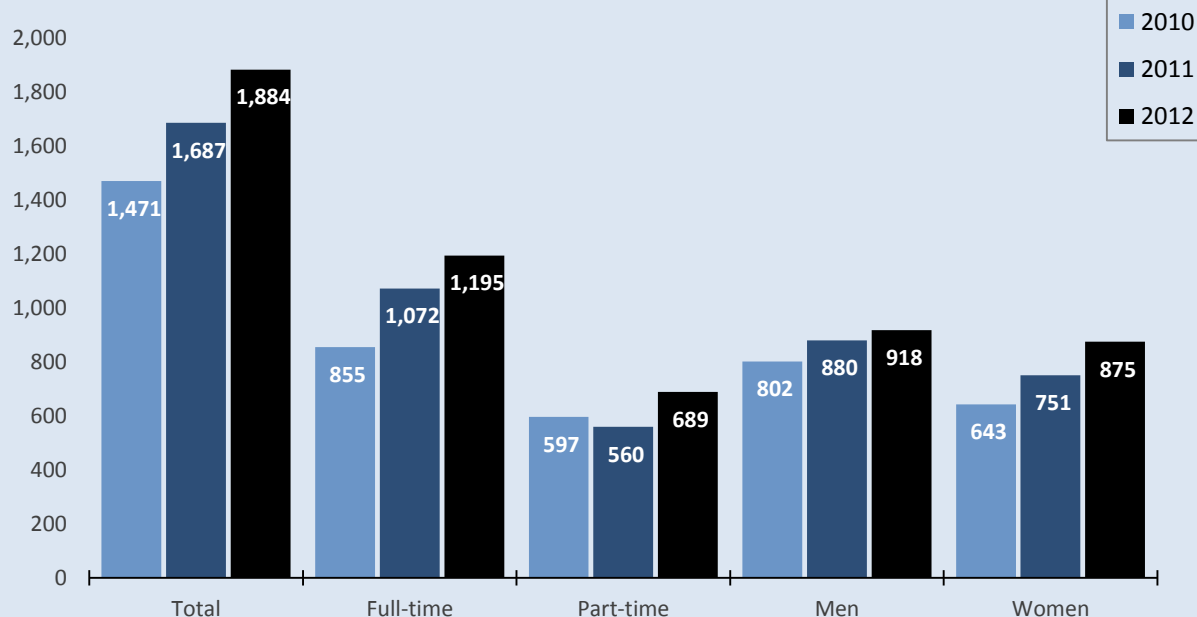
First-time enrollment among full-time students grew by 40% between 2010 and 2012 (from 855 to 1,195), while first-time enrollment among part-time students increased by only 15% (from 597 to 689). Between 2010 and 2011, first-time enrollment among part-time students decreased by 6% (from 597 to 560), and then increased by 23% between 2011 and 2012 (from 560 to 689). For full-time students, a substantial increase (25%) in first-time enrollments occurred between 2010 and 2011 (from 855 to 1,072), and was followed by a more modest 11% increase between 2011 and 2012 (from 1,072 to 1,195).

<sup>1</sup> It is possible, if not likely, that some students applied to and were accepted by more than one PSM program (but enrolled in only one PSM program). The yield rate reported here, therefore, may be somewhat understated.

The number of men enrolled for the first-time in PSM programs increased by 14% between 2010 and 2012 (from 802 to 918), while the number of women increased by 36% (from 643 to 875). Whereas the increase in the number of men enrolling for the first-time in PSM programs was strongly driven by the 10% increase between 2010 and 2011 (from 802 to 880), the increase in women enrolling for the first-time in PSM programs has been a steady 17% between 2010 and 2011 (from 643 to 751) and between 2011 and 2012 (from 751 to 875).

**Figure 22.**

Change in First-Time Enrollment Among All Respondents by Status and Gender, Fall 2010 to Fall 2012

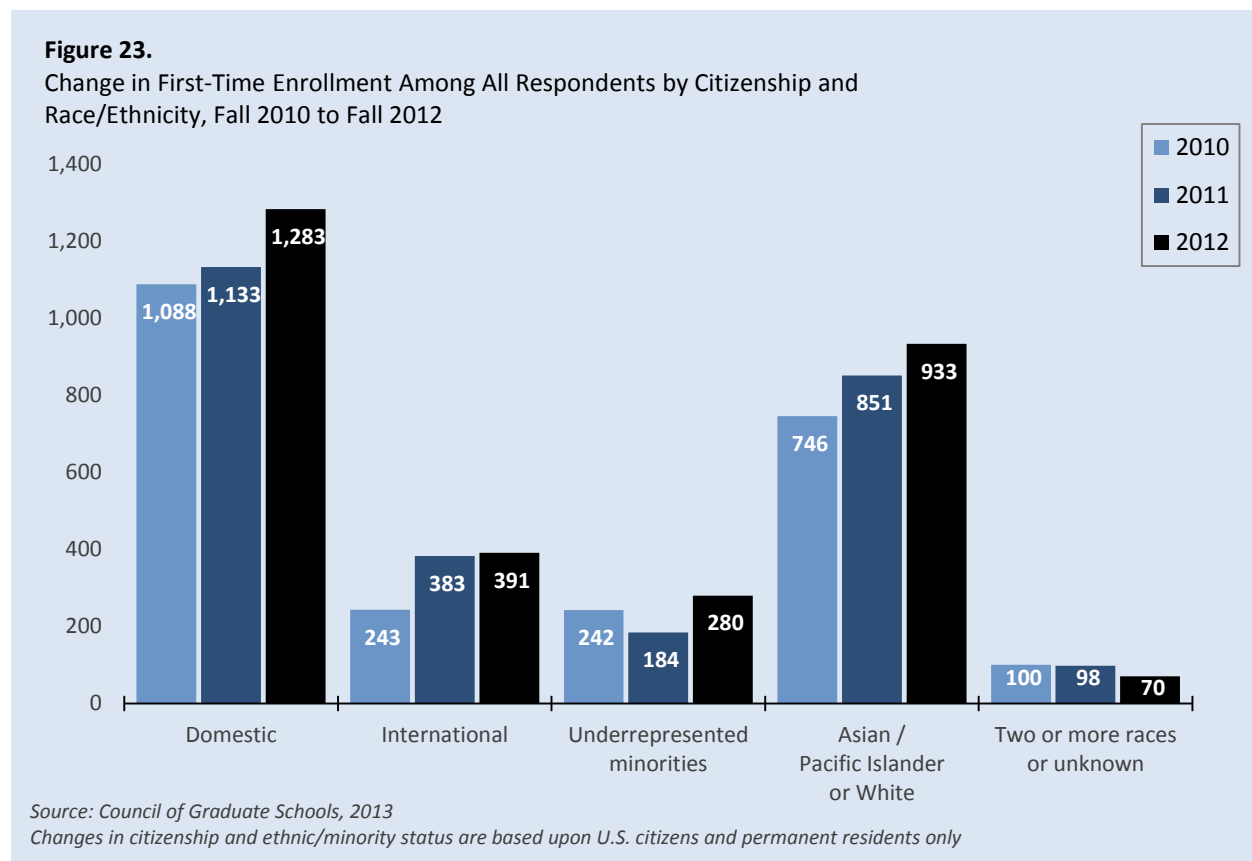


Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

First-time enrollment among international students (i.e., temporary residents) in U.S.-based institutions grew by 58% between 2010 and 2011 (from 243 to 383), and only very slightly (2%) between 2011 and 2012 (from 383 to 391). First-time enrollment among domestic students (i.e., U.S. citizens and permanent residents) increased slightly (4%) between 2010 and 2011 (from 1,088 to 1,133), but was followed by a marked increase of 13% between 2011 and 2012 (from 1,133 to 1,283).

There was an overall increase of 16% in the number of underrepresented minorities enrolled for the first-time in PSM programs between 2010 and 2012 (from 242 to 280). On a year-to-year basis, there was a 24% decrease in the number of underrepresented minorities enrolled for the first-time in PSM programs between 2010 and 2011 (from 242 to 184) followed by a substantial increase of 52% between 2011 and 2012 (from 184 to 280). The number of Asian/Pacific Islander or White first-time enrollees increased by 25% between 2010 and 2012 (from 746 to 933), with increases of 14% between 2010 and 2011 (from 746 to 851) and of 10% between 2011 and 2012 (from 851 to

933). The number of first-time enrollees who were of two or more races or whose race/ethnicity was unknown declined by 30% over the three year period from 100 students in 2010 to 70 students in 2012. A summary of these characteristics appears in Figure 23.



## Total Enrollment

Respondents to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 22% increase in total enrollments, from 4,753 in 2010 to 5,804 in 2012 (see Figure 24). The 15% increase in total enrollments between 2010 and 2011 (from 4,753 to 5,487) was markedly higher than the 6% increase between 2011 and 2012 (from 5,487 to 5,804).

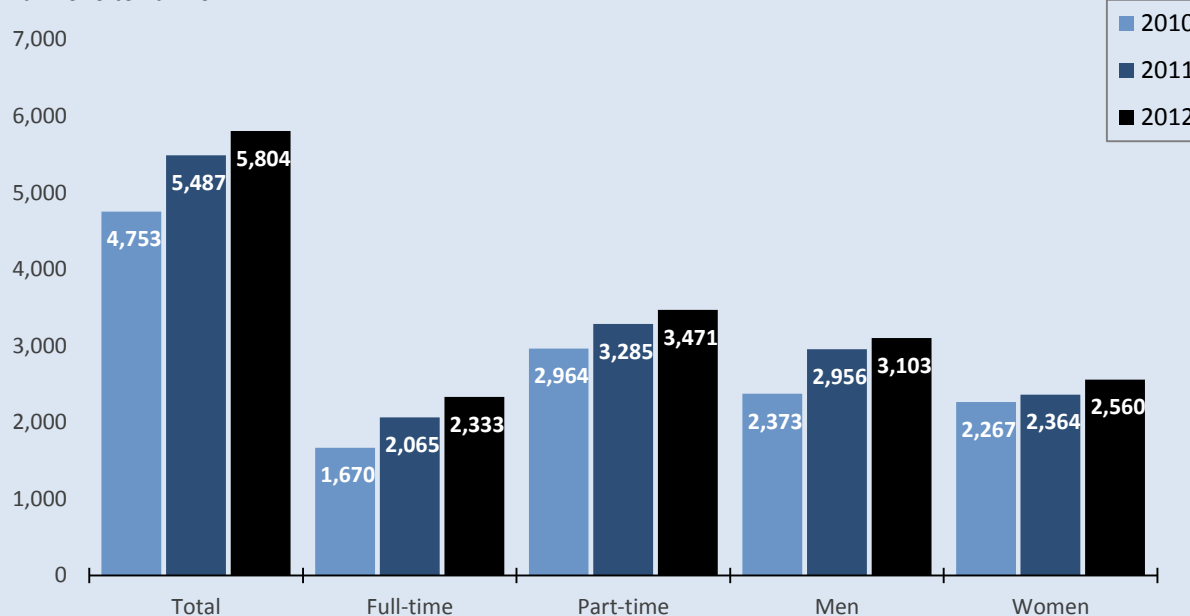
Total enrollment among full-time students grew by 40% and by 17% among part-time students between 2010 and 2012 (from 1,670 to 2,333 for full-time students, and from 2,964 to 3,471 for part-time students). The largest increases in total enrollment among full-time and part-time students occurred between 2010 and 2011 (from 1,670 to 2,065 for full-time students, and from 2,964 to 3,285 for part-time students), 24% and 11% respectively, while smaller increases of 13% and 6% respectively occurred between 2011 and 2012 (from 2,065 to 2,333 for full-time students, and from 3,285 to 3,471 for part-time students).

The number of men enrolled in PSM programs increased by 31% (from 2,373 to 3,103), and the number of women increased by 13% (from 2,267 to 2,560) between 2010 and 2012. While the

number of men enrolled increased markedly between 2010 and 2011 (25%) and only slightly between 2011 and 2012 (5%) (from 2,373 to 2,956 to 3,103), total enrollments among women increased only 4% between 2010 and 2011 (from 2,267 to 2,364) and by 8% between 2011 and 2012 (from 2,364 to 2,560).

**Figure 24.**

Change in Total Enrollment Among All Respondents by Status and Gender, Fall 2010 to Fall 2012



Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

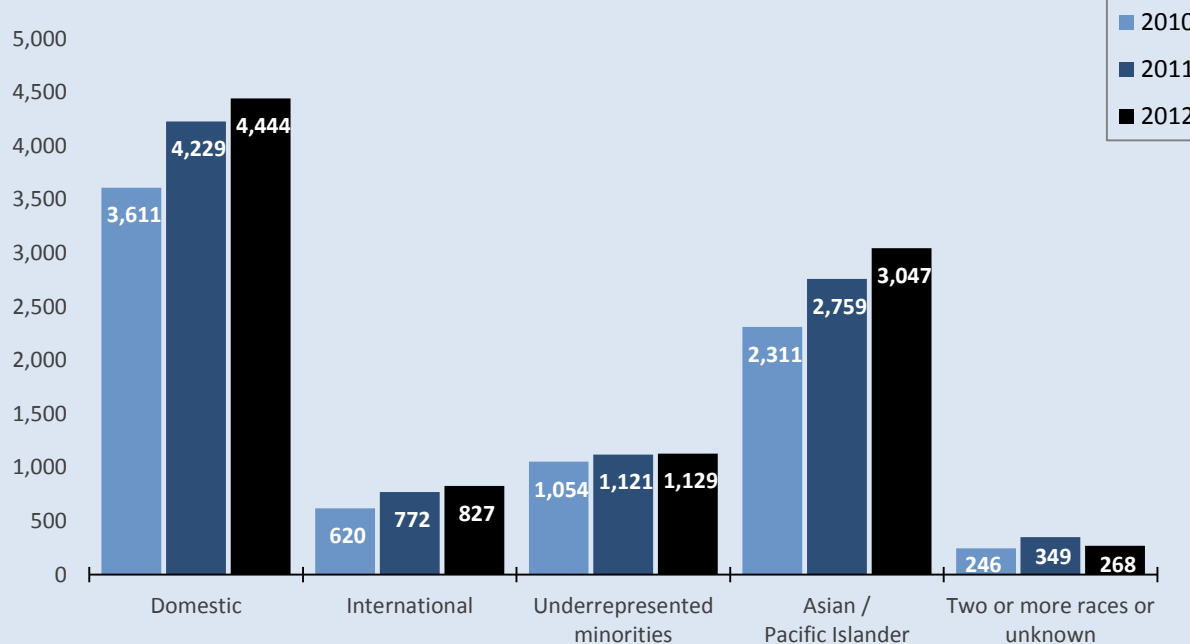
As depicted in Figure 25, overall total enrollment increased by 33% (from 620 to 827) among international students (i.e., temporary residents) and by 23% (from 3,611 to 4,444) for domestic students (i.e., U.S. citizens and permanent residents) in U.S.-based institutions between 2010 and 2012. Total enrollment among international students grew by 25% between 2010 and 2011 (from 620 to 772), and by only 7% between 2011 and 2012 (from 772 to 827). Total enrollment among domestic students followed a similar pattern with increases of 17% between 2010 and 2011 (from 3,611 to 4,229), and 5% between 2011 and 2012 (from 4,229 to 4,444).

There was an overall increase of 7% in the number of underrepresented minorities enrolled in PSM programs between 2010 and 2012 (from 1,054 to 1,129). On a year-to-year basis, there was a 6% increase in the number of underrepresented minorities enrolled in PSM programs between 2010 and 2011 (from 1,054 to 1,121) followed by a slight increase of 1% between 2011 and 2012 (from 1,121 to 1,129). The number of Asian/Pacific Islander or White enrollees increased by 32% between 2010 and 2012 (from 2,311 to 3,047), with a larger increase of 19% between 2010 and 2011 (from 2,311 to 2,759) than the 10% increase between 2011 and 2012 (from 2,759 to 3,047). The number of enrollees who were of two or more races or whose race/ethnicity was unknown increased by

only 9% over the three year period from 246 students in 2010 to 268 students in 2012, with a peak of 349 students in this cohort in 2011.

**Figure 25.**

Change in Total Enrollment Among All Respondents by Citizenship and Race/Ethnicity, Fall 2010 to Fall 2012



Source: Council of Graduate Schools, 2013

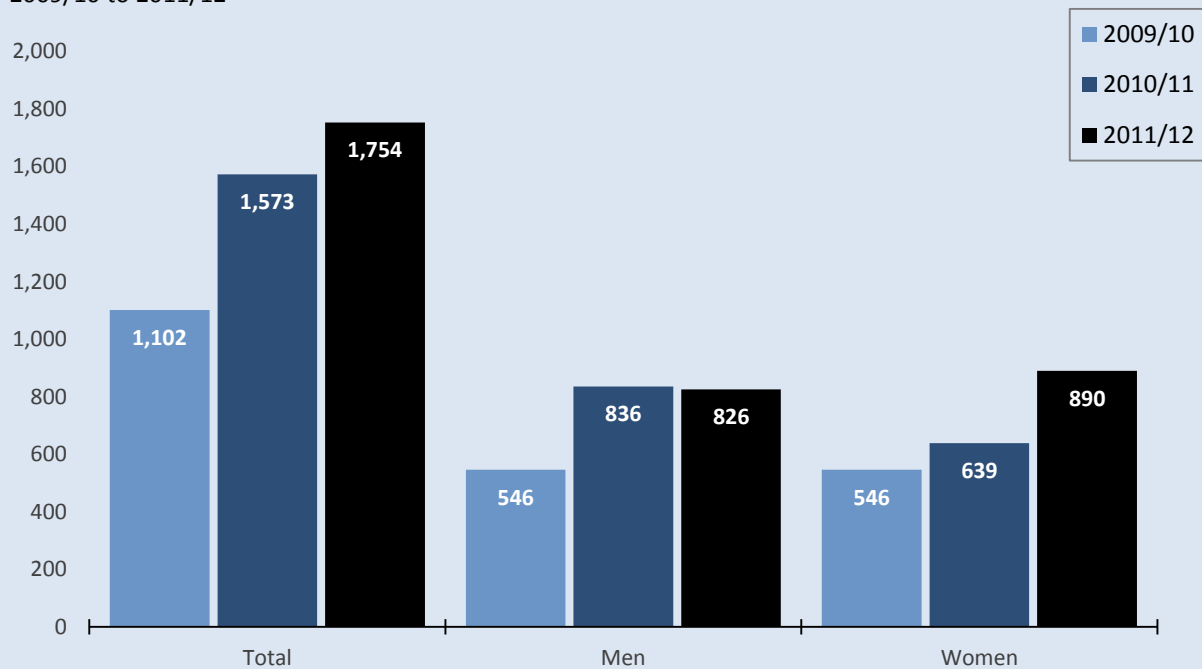
Changes in citizenship and ethnic/minority status are based upon U.S. citizens and permanent residents only

## Degrees

Respondents to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 59% increase in the number of PSM degrees awarded, from 1,102 in academic year 2009/10 to 1,754 in academic year 2011/12 (see Figure 26). The 43% increase in the number of degrees conferred between academic years 2009/10 to 2010/11 (from 1,102 to 1,573) was substantially higher than the 12% increase between 2010/11 and 2011/12 (from 1,573 to 1,754).

The number of men who earned a PSM degree increased by 51% (from 546 to 826) between academic years 2009/10 and 2011/12, and the number of women who earned a PSM degree increased by 63% (from 546 to 890) over the same time period. While the number of men who earned a PSM degree increased markedly by 53% between academic years 2009/10 and 2010/11 (from 546 to 836), it decreased slightly (-1%) between academic years 2010/11 and 2011/12 (from 836 to 826). In contrast, the increase in the number of women earning PSM degrees increased by 17% between 2009/10 and 2010/11 (from 546 to 639) and then increased 39% between academic years 2010/11 and 2011/12 (from 639 to 890).

**Figure 26.**  
Change in Degrees Awarded All Respondents by Gender,  
2009/10 to 2011/12



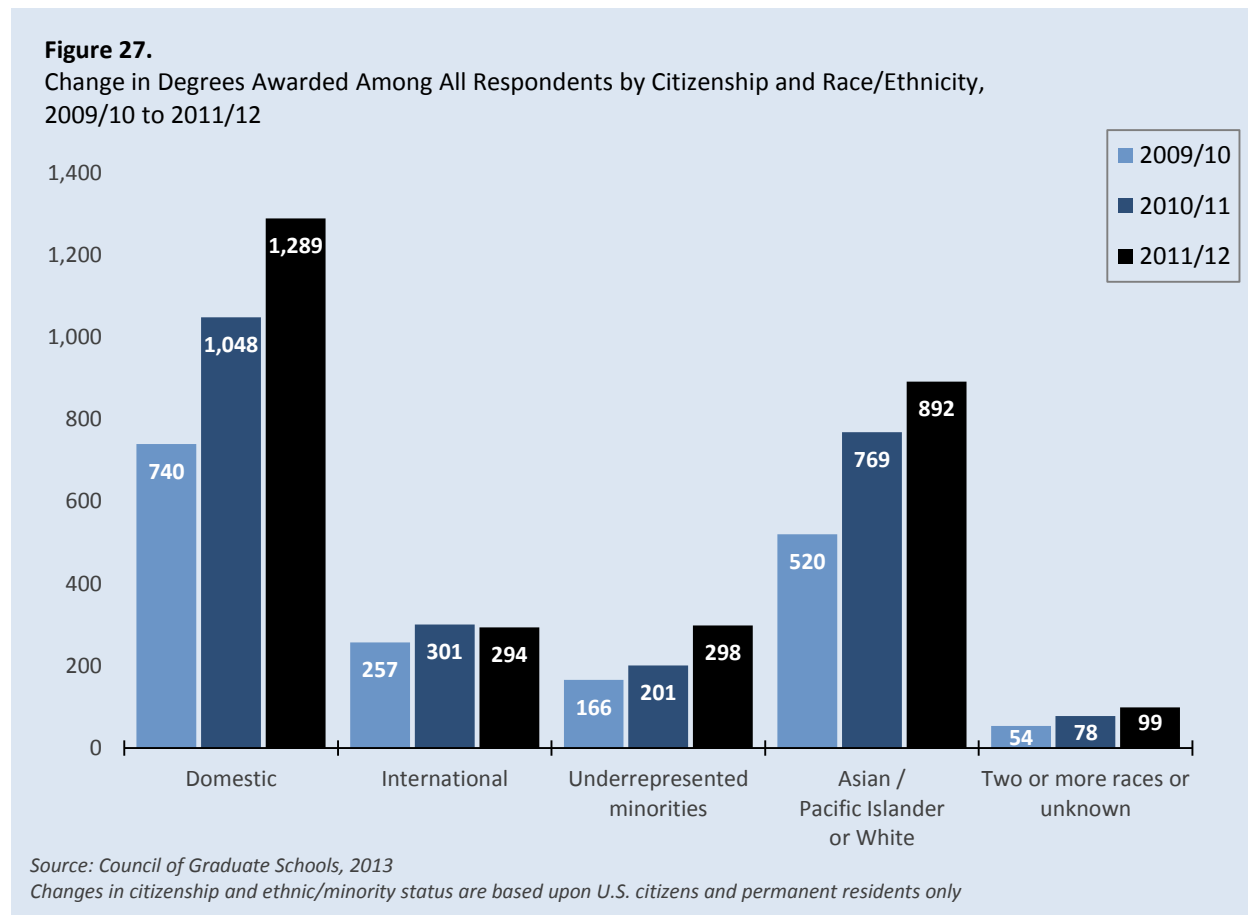
Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

In U.S.-based institutions, the number of degrees earned by international students (i.e., temporary residents) increased by 14% between the 2009/10 and 2011/12 academic years (from 257 to 294), while the number of degrees earned by domestic students (i.e., U.S. citizens and permanent residents) increased by 74% over the same time period (from 710 to 1,289). On a year-to-year basis, the number of degrees earned among international students grew by 17% between academic years 2009/10 and 2010/11 (from 257 to 301), and decreased by 2% between academic years 2010/11 and 2011/12 (from 301 to 294). In contrast, the number of degrees earned among domestic students increased by 42% between academic years 2009/10 and 2010/11 (from 740 to 1,048), and also increased by 23% between academic years 2010/11 and 2011/12 (from 1,048 to 1,289).

There was an overall increase of 80% in the number of underrepresented minorities earning degrees from PSM programs between academic years 2009/10 and 2011/12 (from 166 to 298). On a year-to-year basis, there was a 21% increase in the number of underrepresented minorities earning PSM degrees between academic years 2009/10 and 2010/11 (from 166 to 201) followed by an increase of 48% between academic years 2010/11 and 2011/12 (from 201 to 298).

The number of Asian/Pacific Islander or White students earning PSM degrees increased by 48% between academic years 2009/10 and 2010/11 (from 520 to 769) followed by a much smaller increase of 16% between academic years 2010/11 and 2011/12 (from 769 to 892). The number of

students who were of two or more races or whose race/ethnicity was unknown that earned PSM degrees was a very small cohort of students. Degrees earned by this cohort increased by 44% between academic years 2009/10 and 2010/11 from 54 to 78, and by 27% between academic years 2010/11 and 2011/12 from 78 to 99. A summary of these characteristics appears in Figure 27.



### Comparisons Using Only Programs That Responded to All Three Surveys

This second set of comparisons uses data from just the PSM programs that responded to the 2010, 2011, and the 2012 *Professional Science Master's Enrollment and Degrees Surveys*. This set of comparisons is intended to show changes in the 165 existing PSM programs that reported data for each year between 2010 and 2012.

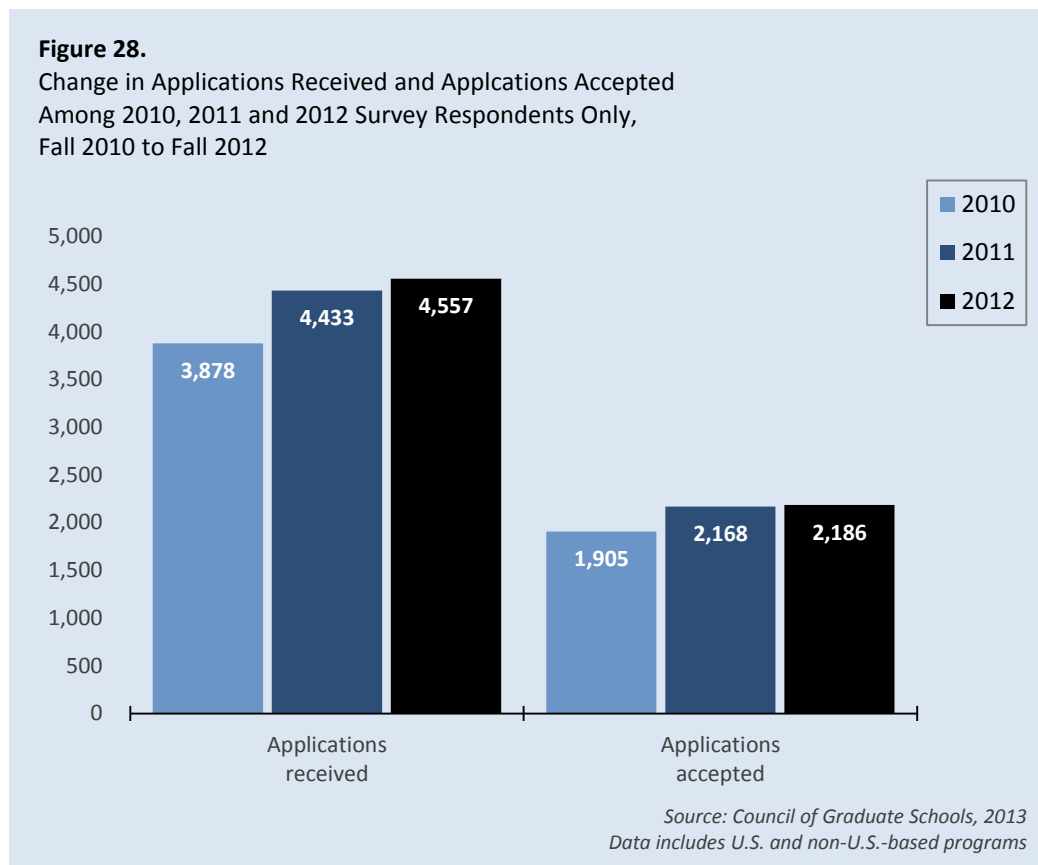
### Applications

PSM programs that responded to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 18% increase in applications received between 2010 and 2012, from 3,878 applications received for fall 2010 to 4,557 applications received for fall 2012 (see Figure 28). The majority of the increase occurred between 2010 and 2011 when applications



received increased by 14% (from 3,878 to 4,433), after which time the trend tapered off between 2011 and 2012 at 3% when applications received only increased from 4,433 to 4,557.

The number of applications accepted increased by 15%, from 1,905 in 2010 to 2,186 in 2012. Much like the number of applications received, the majority of the increase in applications accepted for admission occurred between 2010 and 2011 (14%) when applications accepted increased from 1,905 to 2,168. This was followed by a slight increase of 1% between 2011 and 2012, when applications accepted increased from 2,168 to 2,186.



### First-Time Enrollment

As shown in Figure 29, PSM programs that responded to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported an 8% increase in first-time enrollment, from 1,329 in 2010 to 1,440 in 2012. The increase was steady at 4% for both 2010 to 2011 and for 2011 to 2012 when first-time enrollment increased from 1,329 to 1,381 to 1,440. The yield rate, which is the number of first-time enrollees divided by the number of applications accepted, dropped from 70% in 2010 to 64% in 2011, and then increased to 66% in 2012<sup>2</sup>.

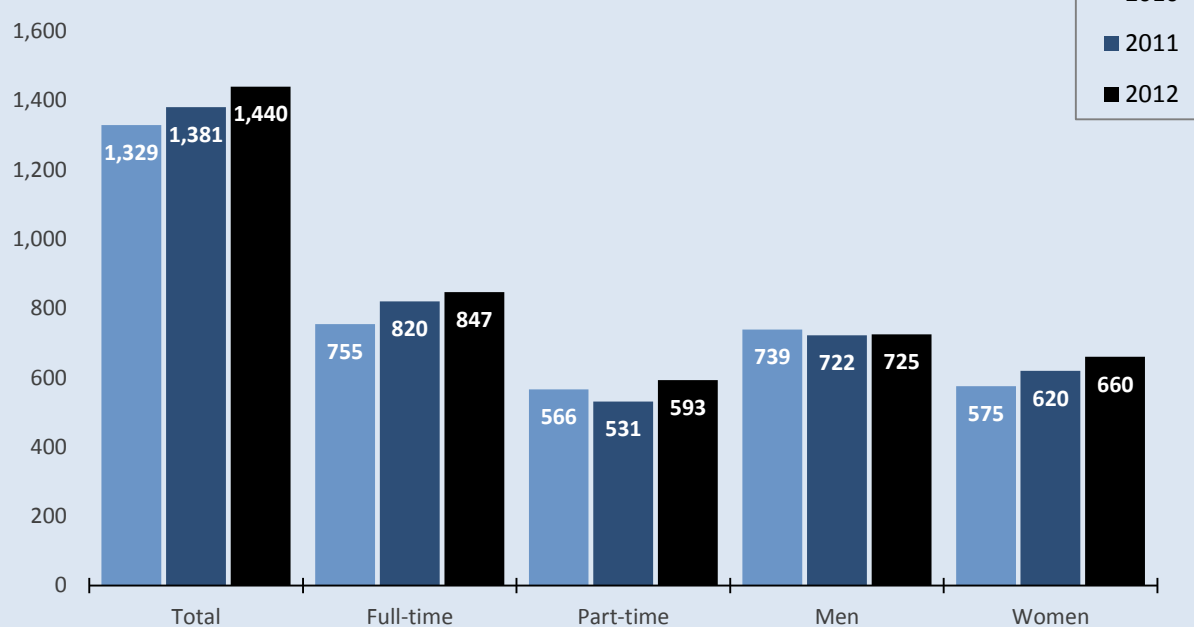
<sup>2</sup> It is possible, if not likely, that some students applied to and were accepted by more than one PSM program (but enrolled in only one PSM program). The yield rate reported here, therefore, may be somewhat understated.

First-time enrollment among full-time students grew by 12% (from 755 to 847), while first-time enrollment among part-time students increased by 5% (from 566 to 593) between 2010 and 2012. Whereas the majority of the first-time enrollment increase for full-time students occurred between 2010 and 2011 (9% between 2010-2011 (from 755 to 820), 3% between 2011-2012 (from 820 to 847)), the increase in first-time enrollment among part-time students was driven by the changes between 2011 and 2012 (-6% between 2010-2011 (from 566 to 531), +12% between 2011-2012 (from 531 to 593)).

While the number of men enrolled for the first-time in PSM programs has remained relatively steady between 2010 and 2012 (from 739 to 725), the number of women increased by 15% over the same time period (from 575 to 660), with steady increases of 8% between 2010 and 2011 (from 575 to 620), and 6% between 2011 and 2012 (from 620 to 660).

**Figure 29.**

Change in First-Time Enrollment by Status and Gender Among 2010, 2011 and 2012 Survey Respondents Only, Fall 2010 to Fall 2012



Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

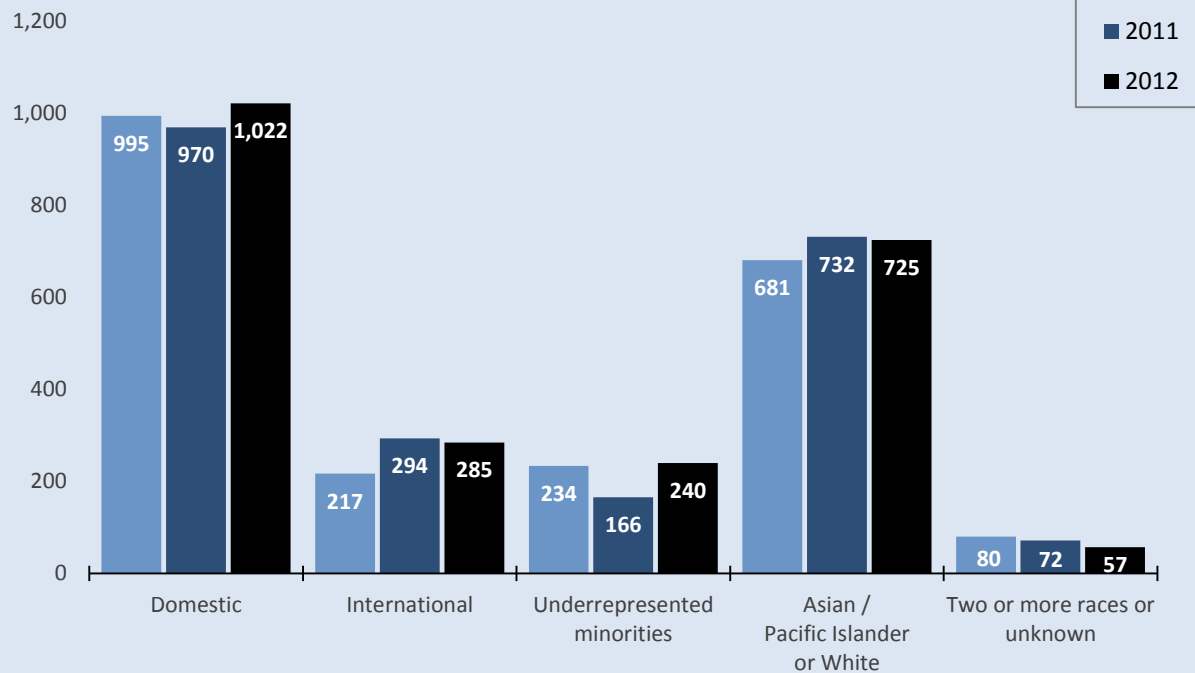
There was an overall increase of 31% (from 217 to 285) in the number of international students (i.e., temporary residents) and an increase of 3% (from 995 to 1,022) in the number of domestic students (i.e., U.S. citizens and permanent residents) enrolled for the first-time in U.S.-based in PSM programs between 2010 and 2012. First-time enrollment among international students in U.S.-based institutions grew by 35% between 2010 and 2011 (from 217 to 294), and decreased slightly by 3% between 2011 and 2012 (from 294 to 285). First-time enrollment among domestic students

decreased by 3% between 2010 and 2011 (from 995 to 970), but was followed by an increase of 5% between 2011 and 2012 (from 970 to 1,022).

There was an overall increase of 3% in the number of underrepresented minorities enrolled for the first-time in PSM programs between 2010 and 2012 (from 234 to 240). Between 2010 and 2011, the number of underrepresented minorities enrolled for the first-time in PSM programs decreased by 29% (from 234 to 166), but was followed by a 45% increase between 2011 and 2012 (from 166 to 240). The number of Asian/Pacific Islander or White first-time enrollees increased by 6% between 2010 and 2012 (from 681 to 725), with most of the increase occurring between 2010 and 2011 (7%; from 681 to 732) and a very slight decrease of 1% occurring between 2011 and 2012 (from 732 to 725). Between 2010 and 2012, there was a marked decrease of 29% in the number of first-time enrollees who were of two or more races or whose race/ethnicity was unknown, with the number of students in this cohort dropping from 80 in 2010 to 57 in 2012. A summary of these characteristics appears in Figure 30.

**Figure 30.**

Change in First-Time Enrollment by Citizenship and Race/Ethnicity Among 2010, 2011 and 2012 Survey Respondents Only, Fall 2010 to Fall 2012



Source: Council of Graduate Schools, 2013

Changes in citizenship and ethnic/minority status are based upon U.S. citizens and permanent residents only

## Total Enrollment

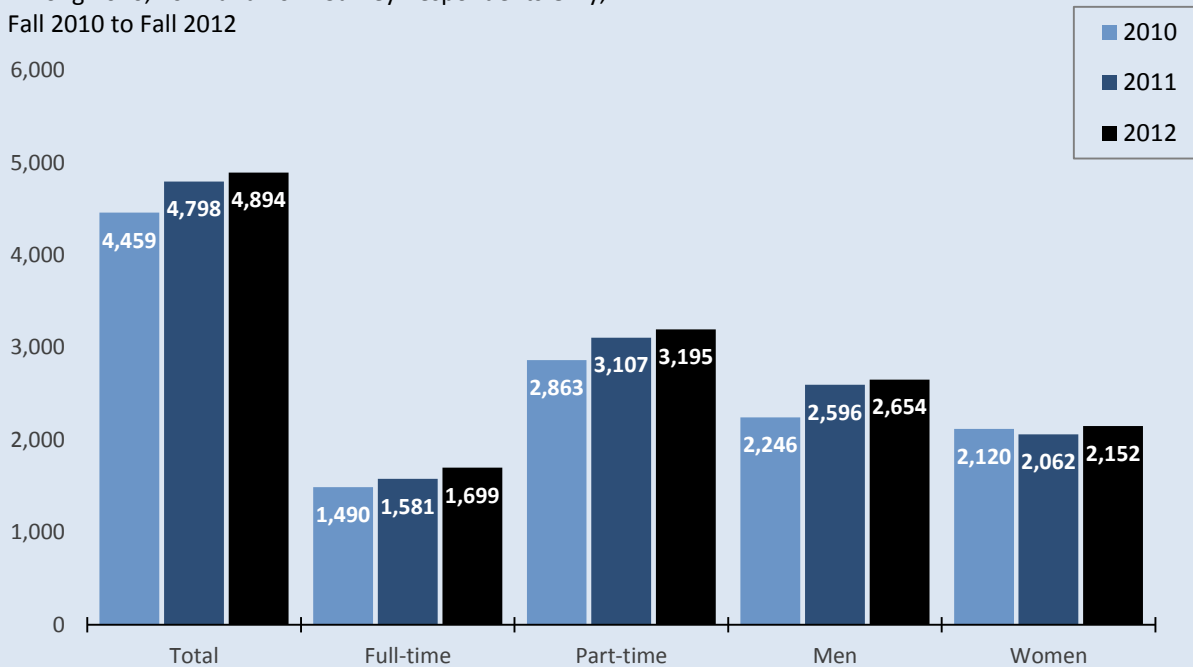
PSM programs that responded to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys* reported a 10% increase in total enrollment, from 4,459 in 2010 to

4,894 in 2012 (see Figure 31). Most of the increase occurred between 2010 and 2011 (8%; from 4,459 to 4,798), after which total enrollments tapered off with a slight increase of 2% between 2011 and 2012 (from 4,798 to 4,894).

Total enrollment grew by 14% among full-time students (from 1,490 to 1,699) and by 12% among part-time students (from 2,863 to 3,195) between 2010 and 2012. Whereas the majority of the total enrollment increase for part-time students occurred between 2010 and 2012 (9% between 2010-2011 (from 2,863 to 3,107), 3% between 2011-2012 (from 3,107 to 3,195)), the increase in total enrollment among full-time students was relatively consistent between 2010 and 2012, with a 6% increase between 2010 and 2011 (from 1,490 to 1,581), and a 7% increase between 2011 and 2012 (from 1,581 to 1,699).

Total enrollment among men enrolled in PSM programs increased by 18% between 2010 and 2012 (from 2,246 to 2,654), while total enrollment among women remained relatively steady over the same time period (from 2,120 to 2,152). The increase in total enrollment among men enrolled in PSM programs occurred between 2010 and 2011 (16%; from 2,246 to 2,596), and was followed by a slight increase (2%) between 2011 and 2012 (from 2,596 to 2,654).

**Figure 31.**  
Change in Total Enrollment by Status and Gender  
Among 2010, 2011 and 2012 Survey Respondents Only,  
Fall 2010 to Fall 2012



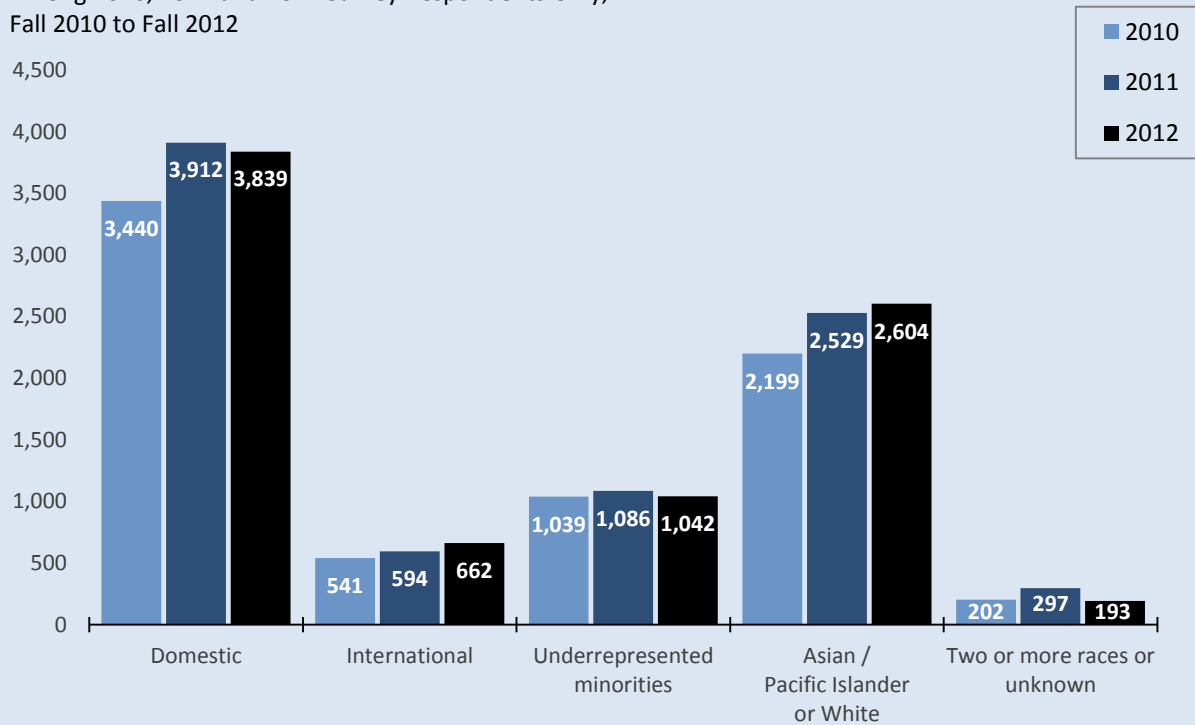
Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

As depicted in Figure 32, there was an overall increase of 22% (from 541 to 662) in the number of international students (i.e., temporary residents) and an increase of 12% (from 3,440 to 3,839) in the number of domestic students (i.e., U.S. citizens and permanent residents) enrolled in U.S.-based in PSM programs between 2010 and 2012. Total enrollment among international students in U.S.-based institutions exhibited steady growth with a 10% increase between 2010 and 2011 (from 541 to 594) and an 11% increase between 2011 and 2012 (from 594 to 662). Total enrollment among domestic students increased by 14% between 2010 and 2011 (from 3,440 to 3,912), but was followed by a decrease of 2% between 2011 and 2012 (from 3,912 to 3,839).

The number of underrepresented minorities enrolled in PSM programs between 2010 and 2012 remained steady with a 5% increase between 2010 and 2011 (from 1,039 to 1,086) that was followed by a 4% decrease between 2011 and 2012 (from 1,086 to 1,042). The number of Asian/Pacific Islander or White enrollees increased by 18% between 2010 and 2012 (from 2,199 to 2,604), with most of the increase occurring between 2010 and 2011 (15%; from 2,199 to 2,529) that was followed by a small increase of 3% between 2011 and 2012 (from 2,529 to 2,604). Between 2010 and 2012, the number of enrollees who were of two or more races or whose race/ethnicity was unknown decreased by 4% (from 202 to 193), although large fluctuations in percentages were evident on a year-to-year basis. The number of students in this cohort increased by 47% between 2010 and 2011 and subsequently decreased by 35% between 2011 and 2012.

**Figure 32.**

Change in Total Enrollment by Citizenship and Race/Ethnicity  
Among 2010, 2011 and 2012 Survey Respondents Only,  
Fall 2010 to Fall 2012

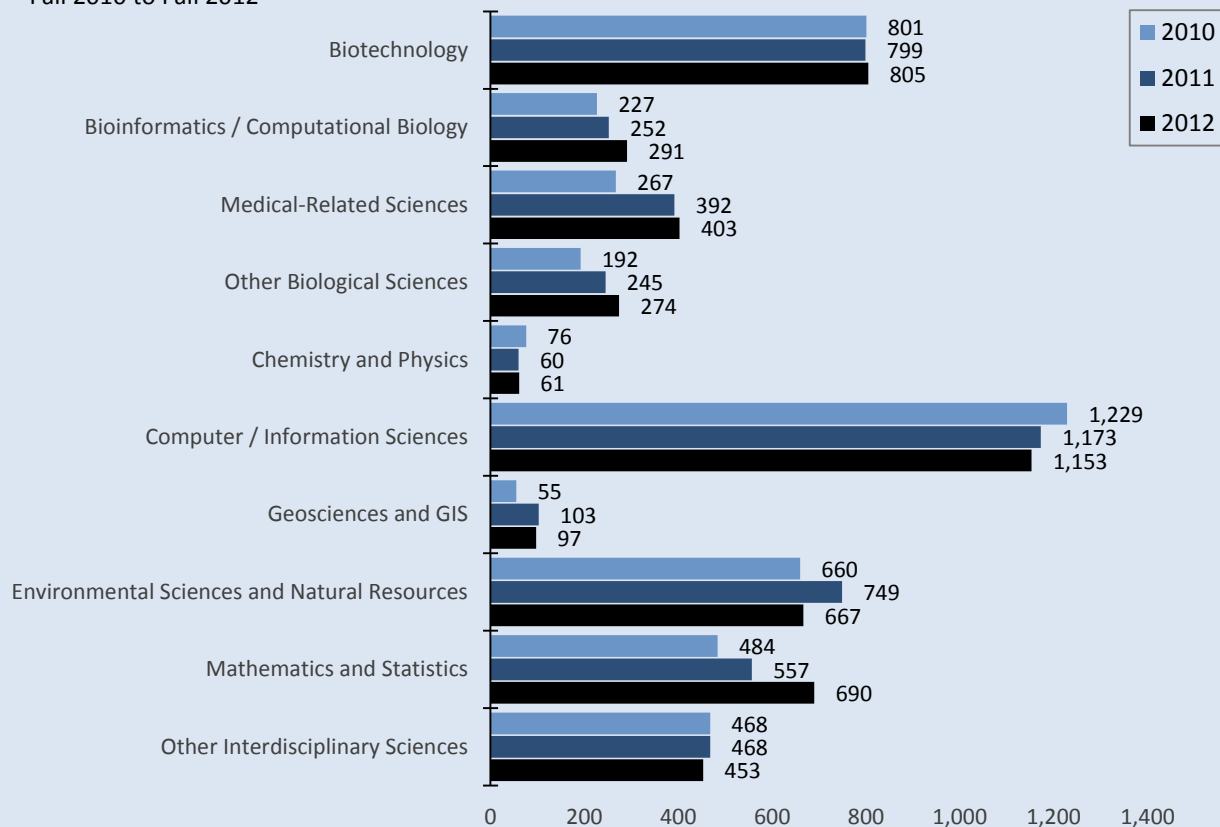


Source: Council of Graduate Schools, 2013

Changes in citizenship and ethnic/minority status are based upon U.S. citizens and permanent residents only

By field of study among PSM programs responding to the 2010, 2011, *and* the 2012 surveys, programs in geosciences and GIS and programs in medical-related sciences reported the largest increases in total enrollment between 2010 and 2012, with gains of 76% (from 55 to 97) and 51% (from 267 to 403), respectively. The large percentage gain reported in the fields of geosciences and GIS is due, at least in part, to the fewer number and smaller sizes of these programs. Other fields with large gains in total enrollment include mathematics and statistics (from 484 to 690) and other biological sciences (from 192 to 274), both of which had increases in total enrollment of 43% between 2010 and 2012. Bioinformatics/computational biology had increases in total enrollment of 28% (from 227 to 291) over the same time period. Total enrollment in chemistry and physics decreased by 20% (from 76 to 61) between 2010 and 2012, and total enrollment in computer/information sciences decreased by 6% (from 1,229 to 1,153) over the same time period. A summary of changes in total enrollment appears in Figure 33.

**Figure 33.**  
Change in Total Enrollment by Field of Study  
Among 2010, 2011 and 2012 Survey Respondents Only,  
Fall 2010 to Fall 2012



Source: Council of Graduate Schools, 2013  
Changes are based upon U.S. and non-U.S.-based programs  
Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

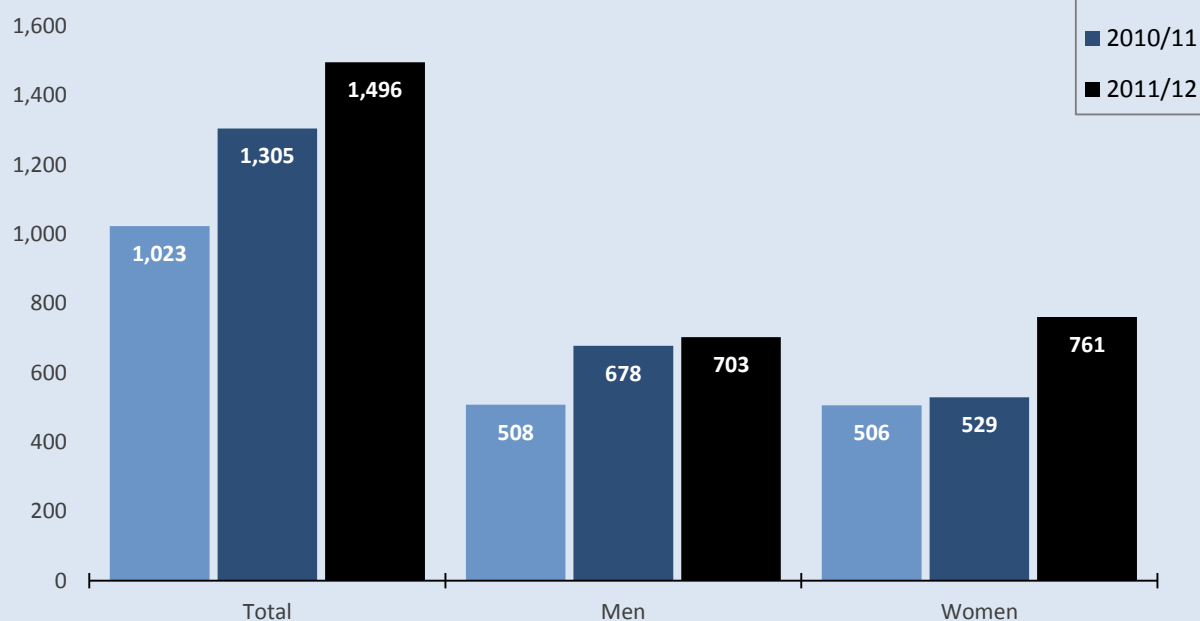
## Degrees

Among those PSM programs responding to the 2010, 2011, and 2012 *Professional Science Master's Enrollment and Degrees Surveys*, there was a 46% increase in the number of PSM degrees awarded, from 1,023 in academic year 2009/10 to 1,496 in 2011/12 (see Figure 34). The 28% increase (from 1,023 to 1,305) in the number of degrees conferred between academic years 2009/10 to 2010/11 was higher than 15% increase (from 1,305 to 1,496) between 2010/11 and 2011/12.

The number of men who earned a PSM degree increased by 38% (from 508 to 703), while the number of women who earned a PSM degree increased by 50% (from 506 to 761) between academic years 2009/10 and 2011/12. While the number of men who earned a PSM degree increased markedly between academic years 2009/10 and 2010/11 (33%; from 508 to 678), it increase only slightly (4%; 678 to 703) between academic years 2010/11 and 2011/12. In contrast, the increase in the number of women earning PSM degrees increased slightly between 2009/10 and 2010/11 (5%; 506 to 529) and then increased markedly by 44% (from 529 to 761) between academic years 2010/11 and 2011/12.

**Figure 34.**

Change in Degrees Awarded by Gender  
Among 2010, 2011 and 2012 Survey Respondents Only,  
2009/10 to 2011/12



Source: Council of Graduate Schools, 2013  
Changes in Total and by Gender are based upon U.S. and non-U.S.-based programs

In U.S.-based institutions, the number of degrees earned by international students (i.e., temporary residents) remained steady at 219 between the 2009/10 and 2011/12 academic years, while the

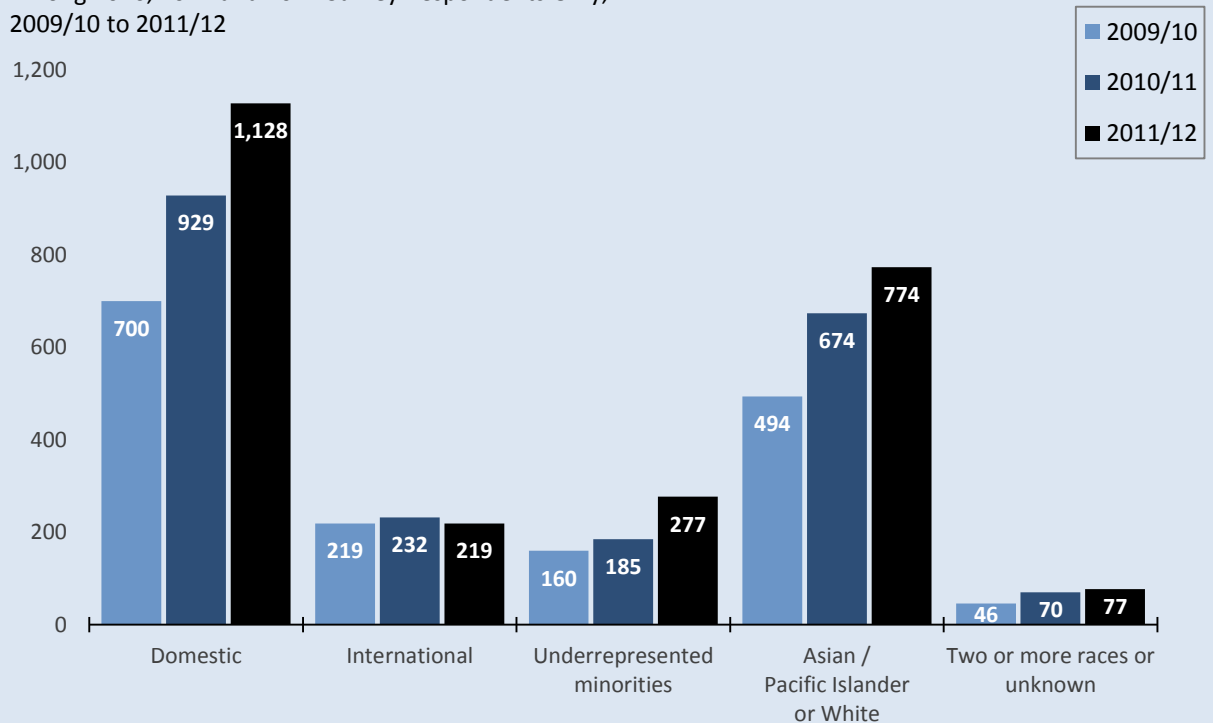
number of degrees earned by domestic students (i.e., U.S. citizens and permanent residents) increased by 61% (from 700 to 1,128) over the same time period. On a year-to-year basis, the number of degrees earned among domestic students increased by 33% (from 700 to 929) between academic years 2009/10 and 2010/11, and increased by 21% (from 929 to 1,128) between academic years 2010/11 and 2011/12.

There was an overall increase of 73% (from 160 to 277) in the number of underrepresented minorities earning degrees from PSM programs between academic years 2009/10 and 2011/12. On a year-to-year basis, there was a 16% (from 160 to 185) increase in the number of underrepresented minorities earning PSM degrees between academic years 2009/10 and 2010/11 followed by an increase of 50% (from 185 to 277) between academic years 2010/11 and 2011/12.

The number of Asian/Pacific Islander or White students earning PSM degrees increased by 36% (from 494 to 674) between academic years 2009/10 and 2010/11 followed by a much smaller increase of 15% (from 674 to 774) between academic years 2010/11 and 2011/12. The number of students who were of two or more races or whose race/ethnicity was unknown that earned PSM degrees was a relatively small cohort of students. Degrees earned by this cohort increased by 52% between academic years 2009/10 and 2010/11 from 46 to 70, and by 10% between academic years 2010/11 and 2011/12 from 70 to 77. A summary of these characteristics appears in Figure 35.

**Figure 35.**

Change in Degrees Awarded by Citizenship and Race/Ethnicity  
Among 2010, 2011 and 2012 Survey Respondents Only,  
2009/10 to 2011/12



Source: Council of Graduate Schools, 2013

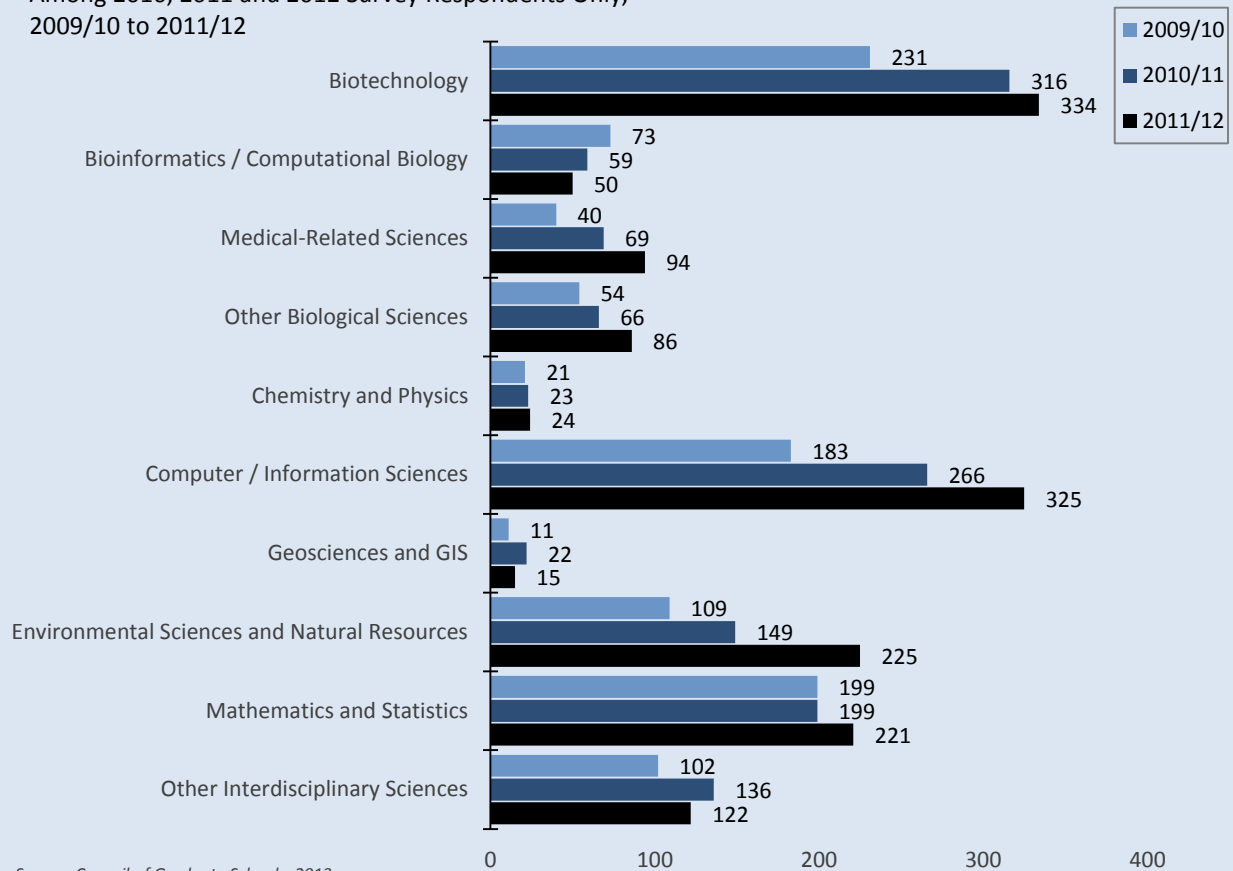
Changes in citizenship and ethnic/minority status are based upon U.S. citizens and permanent residents only



By field of study among PSM programs responding to the 2010, 2011, *and* the 2012 surveys, programs in medical-related sciences and environmental sciences and natural resources reported the largest increases in degrees awarded between the 2009/10 and 2011/12 academic years, with gains of 135% (40 to 94) and 106% (from 109 to 225), respectively. Other fields with large gains in degrees awarded included computer/information sciences and other biological sciences, which increases in degrees awarded between the 2009/10 and 2011/12 academic years of 78% (from 183 to 325) and 59% (from 54 to 86) respectively. The only field where degrees awarded declined between the 2009/10 and 2011/12 academic years was bioinformatics/computational biology, which decreased by 32% (from 73 to 50) over this time period. A summary of changes in degrees awarded appears in Figure 36.

**Figure 36.**

Change in Degrees Awarded by Field of Study  
Among 2010, 2011 and 2012 Survey Respondents Only,  
2009/10 to 2011/12



Source: Council of Graduate Schools, 2013

Changes are based upon U.S. and non-U.S.-based programs

Other Interdisciplinary Sciences includes energy/power, forensic sciences, nanoscience, and national defense

## **Future Professional Science Master's Enrollment and Degrees Surveys**

The *2013 Professional Science Master's Enrollment and Degrees Survey* will be launched in October 2013 by the Council of Graduate Schools. The survey will use the same methodology utilized in the 2010 through 2012 surveys. The report summarizing the 2013 survey results will include the same type of analyses presented in this report, as well as data on the four-year and year-to-year changes from 2010 to 2013.

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## **Appendix: Survey Questionnaire**

## 2012 Professional Science Master's (PSM) Enrollment and Degrees Survey

### Section I. Institution and Program

Institution name ..... Full name of the PSM program or track (no abbreviations). <i>(Complete a separate questionnaire for each program or track.)</i> Name of the individual completing this questionnaire. .... Phone number ..... E-mail address .....	<input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/>
<input type="checkbox"/> ← Check this box if your program or track <u>has not yet</u> enrolled any students (as of fall 2012), then click the "Submit Form" button in the upper right hand corner. Otherwise, continue to Section II.	

### Section II. Applications

Total number of applications: Received for admission for 2012 fall term. .... Accepted for admission for 2012 fall term. ....	<input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/>
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### Section III. Enrollment and Degrees

Characteristics	(Column A) First-time enrollment 2012 fall term	(Column B) Total enrollment 2012 fall term	(Column C) Degrees awarded academic year 2011/12
<b>Gender</b>			
Men. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Women. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Unknown. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Total	<input style="width: 40px; height: 20px;" type="text"/>	Total	<input style="width: 40px; height: 20px;" type="text"/>
<b>U.S. citizens and permanent residents</b>			
URM (underrepresented minorities: Hispanic, American Indian, African American). ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Non-URM (Asian/Pacific Islander, White). ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Other (race/ethnicity unknown, two or more races). ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Non-resident aliens (temporary residents). ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Citizenship unknown. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Total	<input style="width: 40px; height: 20px;" type="text"/>	Total	<input style="width: 40px; height: 20px;" type="text"/>
<b>Enrollment Status</b>			
Full-time. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Part-time. ....	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>	<input style="width: 40px; height: 20px;" type="text"/>
Total	<input style="width: 40px; height: 20px;" type="text"/>	Total	<input style="width: 40px; height: 20px;" type="text"/>

**Click the "Submit Form" button in the top right hand corner to send your questionnaire to CGS or e-mail your completed survey as a PDF attachment to Jeannette Remington at [jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu).**

**Please submit your questionnaire by November 16, 2012.**

*If you have problems submitting this questionnaire electronically, please contact Jeannette Remington at (202) 461-3860 or [jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu). For questions about this survey and/or questionnaire, please contact Jeff Allum at (202) 461-3878 or [jallum@cgs.nche.edu](mailto:jallum@cgs.nche.edu).*

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## SURVEY INSTRUCTIONS AND DEFINITIONS

**About This Survey.** The *2012 Professional Science Master's Enrollment and Degrees Survey* is an annual survey of enrollment and degrees in Professional Science Master's (PSM) programs. Previous surveys were conducted in 2010 and 2011 by the Council of Graduate Schools (CGS) and in 2008 and 2009 by the National Professional Science Master's Association (NPSMA). The 2012 survey is being carried out by the Council of Graduate Schools with a grant from the Alfred P. Sloan Foundation. It is being sent to program directors who oversee programs recognized as PSMs with a copy to the graduate dean (or equivalent). It collects data regarding applications, first-time enrollment, total enrollment, and degrees awarded. As noted in the *Guidelines for Recognition as a Professional Science Master's Program*, PSM programs must collect annual data relative to enrollment, degrees, completion, and demographics. The results will be published in January 2013. A link to the report will be e-mailed to PSM program directors and graduate deans (or equivalent) and posted online at [www.sciencemasters.com](http://www.sciencemasters.com) and [www.cgsnet.org](http://www.cgsnet.org). CGS will prepare customized reports for each PSM-granting program, comparing their program with the national dataset.

**Confidentiality.** All data and information submitted for the *2012 Professional Science Master's Enrollment and Degree Survey* will be treated as confidential and will be used only for research or statistical purposes. Any information released publicly will be in a format that does not allow the identification of institutions or the personal identification of students. All survey data are stored on a secure, password-protected server, and access to the raw survey data is restricted to those individuals directly involved in data collection and analysis. Participation in this survey is voluntary.

**Instructions for Completing the Survey.** The *2012 Professional Science Master's Enrollment and Degree Survey* includes three sections: Section I (Institution and Program); Section II (Applications); and Section III (Enrollment and Degrees). Specific instructions for each section are described below. **Complete a separate questionnaire for each PSM program or track at your institution.**

### Section I. Institution and Program

Enter the full name of your institution and PSM program or track (without abbreviations). **Institutions with more than one PSM program or track must complete a separate questionnaire for each program or track.** Enter the full name of the individual completing the questionnaire, as well as his/her phone number and e-mail address. This contact information may be used should CGS researchers need to clarify survey responses.

### Section II. Applications

This section collects data regarding the number of applications received and accepted for the 2012 fall term. Specific instructions for completing this portion of the survey are as follows:

- **Total number of applications received for admission for 2012 fall term**—The number of completed applications received for admission for the 2012 fall term, which fulfill the institution's requirements to be considered for admission (including payment or waiving of the application fee, if any).
- **Total number of applications accepted for admission for 2012 fall term**—The number of applicants who have fulfilled the institution's requirements to be considered for admission (including payment or waiving of the application fee, if any) and have been granted an offer of admission for the 2012 fall term.

### Section III. Enrollment and Degrees

Section III collects three types of data (first-time enrollment, total enrollment, and degrees awarded) according to three types of characteristics (gender, citizenship/race/ethnicity, and enrollment status). Specific instructions for completing this portion of the survey are as follows:

- **Column A: First-time enrollment 2012 fall term**—Enter the number of students enrolled for the first time in the PSM program at your institution during the 2012 fall term by gender, citizenship/race/ethnicity, and enrollment status. This may include PSM students previously enrolled in another graduate program at your institution or in a graduate program at another institution. It may also include students who already hold another graduate or professional degree. **Report first-time enrollment in whole numbers. Do not use a full-time-equivalent (FTE) calculation for part-time students; rather, count each student as "1" regardless of their enrollment status.** Do not include non-degree students.
- **Column B: Total enrollment 2012 fall term**—Report all students enrolled in the PSM program at your institution during the 2012 fall term by gender, citizenship/race/ethnicity, and enrollment status. Include first-time (column A)

and continuing students. **Report total enrollment in whole numbers. Do not use a full-time-equivalent (FTE) calculation for part-time students; rather, count each student as “1” regardless of their enrollment status.** Do not include non-degree students.

- **Column C: Degrees awarded academic year 2011/12**—Report graduates who earned a degree from the PSM program in academic year 2011/12 (between July 1, 2011 and June 30, 2012) by gender and citizenship/race/ethnicity.
- **Characteristics**—This survey is designed to collect data regarding enrollments and degrees according to three types of enrollee/graduate characteristics (gender, citizenship/race/ethnicity, and enrollment status). Demographic categories are based upon those used by the federal government. Specific instructions are as follows:
  - **Gender**—Within each column (A, B, and C), report the number of men, women, and unknown gender, as well as the total for gender.
  - **Citizenship/race/ethnicity**—Within each column (A, B, and C), report the number of enrollees/graduates who are U.S. citizens and permanent residents (subdivided by race/ethnicity), non-resident aliens (temporary residents), or of unknown citizenship, as well as the total. Use the following definitions when determining the number of enrollees/graduates by citizenship/race/ethnicity:
    - **U.S. citizens and permanent residents**—Indicate the number of enrollees/graduates who are U.S. citizens, including those from Puerto Rico and the U.S. territories, and permanent residents holding green cards according to the three race/ethnicity categories below:
      - **URM (underrepresented minorities)**—Include enrollees/graduates who are:
        - **Hispanic/Latino**—U.S. citizens or permanent residents of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
        - **American Indian/Alaska Native**—U.S. citizens or permanent residents having origins in any of the original peoples of North and South America (including Central America) who maintain cultural identification through tribal affiliation or community attachment.
        - **Black/African American**—U.S. citizens or permanent residents having origins in any of the black racial groups of Africa (except those of Hispanic origin).
      - **Non-URM**—Include enrollees/graduates who are:
        - **Asian**—U.S. citizens or permanent residents having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Malaysia, Pakistan, the Philippines, South Korea, Thailand, and Vietnam.
        - **Native Hawaiian/Other Pacific Islander**—U.S. citizens or permanent residents having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands.
        - **White**—U.S. citizens or permanent residents having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).
      - **Other**—Include enrollees/graduates who are:
        - **Race/ethnicity unknown**—Include enrollees/graduates who are U.S. citizens or permanent residents whose race/ethnicity is not known.
        - **Two or more races**—U.S. citizens or permanent residents having origins in any two or more of the following race categories: American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander, or White. Note: All individuals of Hispanic/Latino origin should be reported in the “URM” field of this questionnaire, regardless of race.
    - **Non-resident aliens (temporary residents)**—Indicate the number of enrollees/graduates who are not citizens, national, or permanent residents of the United States and who are in the country on a visa or temporary basis and do not have the right to remain indefinitely.

- **Citizenship unknown**—Report the number of enrollees/graduates whose citizenship is not known.
- **Enrollment status**— Within columns A and B (first-time enrollment and total enrollment) report the number of enrollees who are enrolled full-time and part-time for the 2012 fall term. Use your institution's definition of full-time and part-time enrollment status.
- **IMPORTANT—Consistency Check.** Section III of this survey is designed to capture enrollment and degree data according to three types of enrollee/graduate characteristics: gender, citizenship/race/ethnicity, and enrollment status. ***The totals for each of these types of characteristics within each column should be equivalent.*** For example, if the PSM program at your institution has 18 first-time enrollees, then report a total of 18 first-time enrollees by gender, 18 first-time enrollees by citizenship/race/ethnicity, and 18 first-time enrollees by enrollment status in column A.

**Survey Submission.** After filling in all fields, please click the “Submit Form” button in the top right hand corner of the toolbar. A new window will appear in Adobe title “Send Form” addressed to CGS research. Include your e-mail address and full name in the “From” section. Click the “Send” button to submit the questionnaire. If you do not see a “Submit Form” button, please send your completed form as a PDF attachment to CGS staff member Jeannette Remington at [jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu). You will receive a confirmation e-mail if we received your completed survey. If you do not receive a confirmation e-mail, please contact Jeannette Remington.

**Problems Submitting This Form?** This fillable PDF form is compatible with Adobe Acrobat Reader. Users of older versions of Adobe Acrobat Reader, or other PDF readers such as Macintosh Preview, Sumatra PDF, or Foxit may experience difficulties when trying to complete and submit this form. If you experience difficulties submitting this form, click [here](#) to download the most recent version of Adobe Acrobat Reader. Alternatively, you may either: (1) save the completed form as a PDF onto your desktop and e-mail it as an attachment to Jeannette Remington at [jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu) or (2) print the completed questionnaire and fax it to (202) 331-7157. If you have questions about any of these methods, please contact Jeannette Remington at (202) 461-3860 or [jremington@cgs.nche.edu](mailto:jremington@cgs.nche.edu).

**Deadline. Please submit your completed survey by November 16, 2012.**

**Questions.** For questions about this survey, please contact Jeff Allum at (202) 461-3878 or [jallum@cgs.nche.edu](mailto:jallum@cgs.nche.edu).



**Council of Graduate Schools**  
One Dupont Circle NW  
Suite 230  
Washington, DC 20036-1173

Phone: (202) 223-3791  
<http://www.cgsnet.org>

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