Findings from the 2013 CGS International Graduate Admissions Survey

Phase II: Final Applications and Initial Offers of Admission

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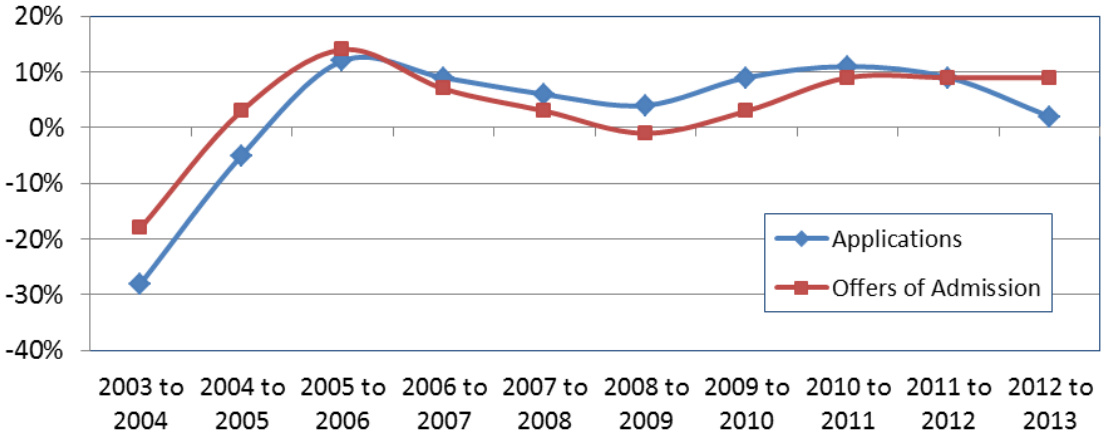
Overview

In 2004, the Council of Graduate Schools (CGS) began a multi-year empirical examination of international graduate application, admission, and enrollment trends in response to member institutions' concerns about continuing changes in the enrollment of students from abroad seeking master's and doctoral degrees from U.S. colleges and universities. The core of this examination is a three-phase survey of CGS member institutions. The *CGS International Graduate Admissions Survey* collects an initial snapshot of applications to U.S. graduate schools from prospective international students (*Phase I*, conducted in February each year), final applications and an initial picture of admissions offers to prospective international students (*Phase II*, June), and final offers of admission and first-time and total international graduate student enrollment (*Phase III*, October).[1]

Data from this year's *Phase II* survey reveal that applications from prospective international students to U.S. graduate schools increased 2% in 2013, marking the eighth consecutive year of growth (see Figure 1), albeit much slower growth than in 2012. Over the past seven years, the year-to-year growth in international applications has ranged from a high of 12% in 2006 to a low of 2% in 2013, but these eight years of growth follow a 28% decline in applications from prospective international graduate students in 2004, and a subsequent 5% decline in 2005. The *Phase II* survey also found that initial offers of admission to prospective international graduate students increased 9% in 2013, following a similar 9% gain in 2012.

Figure 1. Year-to-Year Percent Change in International Applications and Offers of Admission, 2003 to 2004 through 2012 to 2013



Note: Offers of admission data for 2013 are preliminary. All other data points reflect final figures.
Sources: CGS International Graduate Admissions Survey, Phases II and III, 2004 to 2013

[1] See http://www.cgsnet.org/benchmarking/international-graduate-admissions-survey for reports from the *CGS International Graduate Admissions Survey* from 2007 to present.

This report first describes the survey methodology used to collect data and calculate changes in international applications and offers of admission from 2012 to 2013. The second section presents the current survey results on applications from prospective international students to U.S. graduate schools and compares the one-year changes to those in prior years. The third section presents the current survey results on offers of admission to prospective international students and compares the one-year changes to those in prior years. Section four presents data on increases and declines in graduate programs. Section five provides a summary and conclusions.

I. Survey Methodology and Response Rate

The survey population for the *2013 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* consisted of 512 U.S. colleges and universities that were members of CGS as of June 2013.[2] The survey instrument was e-mailed to the graduate dean (or equivalent) and data coordinator(s) at each member institution on June 4, 2013, and responses were collected electronically through July 18, 2013.

The survey asked institutions to report their final numbers of completed applications received from prospective international students for fall 2012 and fall 2013. In addition, institutions were asked to provide the number of offers of admission granted to prospective international students for fall 2012 and fall 2013, as of June 4th or the same date each year. See Appendix A for the survey questionnaire and taxonomy of fields of study. In the survey, an international student is defined as a person who is not a citizen, national, or permanent resident of the United States and is in this country on a student visa, or on a temporary basis, and does not have the legal right to remain indefinitely. Institutions were also asked to provide applications and admissions data for students who originate from ten key sending countries or regions and for eight broad fields of study. In addition, the survey included a series of questions to explore campus-level explanations behind the apparent shift in applications as identified in the *2013 CGS International Graduate Admissions Survey, Phase I: Applications* report.

A total of 290 institutions responded to the survey, for a response rate of 57%. The response rates among certain types of institutions were even higher: nine of the ten institutions that award the largest numbers of master's and doctoral degrees to international students (90%), 22 of the 25 largest (88%), 46 of the 50 largest (92%), and 79 of the 100 largest (79%) responded to the survey.[3] The high response rates from these institutions are important because collectively

[2] CGS also has member institutions in Canada and global affiliates. These institutions are not included in the survey population for the *CGS International Graduate Admissions Survey*.

[3] These figures are based on graduate degrees awarded in academic year 2010-11. Data were derived from the Integrated Postsecondary Education Data System (IPEDS) data files (http://nces.ed.gov/ipeds/).

the 100 largest institutions confer about 56% of all graduate degrees awarded annually to international students in the United States.[4] Overall, the 290 institutions responding to the *Phase II* survey conferred about 67% of the approximately 103,000 graduate degrees awarded to international students in the United States in 2010-11, suggesting that the survey results accurately depict recent trends in the participation of international students in U.S. graduate education.[5]

Institutions responding to the *Phase II* survey provided data on a total of 672,256 applications to U.S. graduate schools by prospective international students for fall 2013 and on a total of 172,415 offers of admission to international students for fall 2013. In a few cases, institutions were unable to provide data for both 2012 and 2013 for either the totals or one of the subcategories. In those instances, these respondents were excluded from the appropriate analyses. Data were not imputed for non-responding institutions.

For some colleges and universities, the *Phase II* survey was administered before final offers of admission numbers were known, and these institutions provided preliminary figures as of the same date each year. For that reason, the survey results on offers of admission (described in section three of this report) should be considered preliminary, subject to revision in the 2013 *Phase III* survey when final offers of admission numbers are reported. Nonetheless, past *Phase II* surveys have shown that because of the high response rates among the institutions awarding large numbers of graduate degrees to international students, and the large numbers of applications and offers of admission represented in the *Phase II* survey data, the overall results should accurately illustrate the current trends in international graduate student applications and offers of admission in the United States.

II. Survey Results

Total Number of Applications

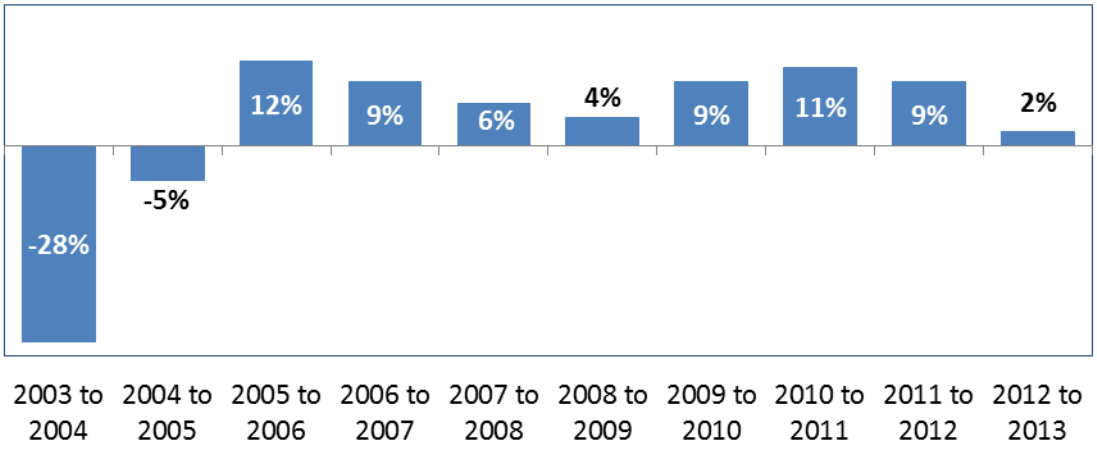
This year, applications to U.S. graduate schools from prospective international students increased for the eighth year in a row. Between 2012 and 2013, international graduate applications increased 2%, following a 9% gain in 2012 and an 11% increase in 2011 (see Figure 2). The final 2% increase in applications from prospective international graduate students for fall 2013 is consistent with the 1% increase in initial international applications reported in April 2013 by CGS in the *Phase I* survey results.

The majority of this year's *Phase II* survey respondents reported an increase in applications from prospective international students in 2013. Of the 277 institutions that provided total applications data for both 2012 and 2013 in this year's *Phase II* survey, 148 (53%) reported an increase in international applications for fall 2013, with an average increase of 8% at these institutions. At the 127 institutions (46%) reporting a decrease, the average decline in

[4] See footnote 3.
[5] See footnote 3.

international applications was 5%. Two institutions (1%) reported no change in international applications between 2012 and 2013.

Figure 2. Year-to-Year Percent Change in Applications to U.S. Graduate Schools from Prospective International Students, 2003 to 2004 through 2012 to 2013



Sources: CGS International Graduate Admissions Survey, Phase II, 2004 to 2013

Applications by Field of Study

According to CGS's *Graduate Enrollment and Degrees: 2001 to 2011* report, international students comprise about 15% of all students at U.S. graduate schools, but three-quarters (76%) of all international students at U.S. graduate schools are enrolled in natural sciences, engineering, and business fields, and just one-quarter (24%) are in social sciences, arts and humanities, education, and other fields.[6] More than one-quarter (27%) of all international graduate students at U.S. institutions are enrolled in engineering, 17% are in business, 20% are in physical and earth sciences and mathematics and computer sciences, and 8% are in the life sciences.[7] Just 8% of all international graduate students at U.S. institutions are enrolled in social sciences and psychology, 6% are in arts and humanities, 4% are in education, and 5% are in 'other' fields.[8]

The *Phase II* survey results reveal that international applications decreased in three broad fields of study between 2012 and 2013: life sciences (-7%), education (-2%), and social sciences and

[6] Allum, J.R., Bell, N.E., & Sowell, R.S. (2012). *Graduate enrollment and degrees: 2001 to 2011*. Washington, DC: Council of Graduate Schools. Natural sciences includes biological and agricultural sciences, health sciences, mathematics and computer sciences, and physical and earth sciences. Social sciences include public administration and services and social and behavioral sciences.
[7] See footnote 6.
[8] See footnote 6.

psychology (-2%).[9] The largest increase in international applications in 2013 occurred in engineering and 'other' fields, with each field reporting 5% increases. As shown in Table 1, growth in applications also occurred in arts and humanities (4%), physical and earth sciences (3%), and business (1%).

Table 1. Change in International Graduate Applications by Field of Study, 2009 to 2010 through 2012 to 2013

	Final Number of Applications, 2009 to 2010	Final Number of Applications, 2010 to 2011	Final Number of Applications, 2011 to 2012	**Final Number of Applications, 2012 to 2013**
International Total	9%	11%	9%	**2%**
Field of Study				
Arts & Humanities	9%	8%	7%	**4%**
Business	11%	11%	7%	**1%**
Education	8%	13%	18%	**-2%**
Engineering	8%	14%	14%	**5%**
Life Sciences	2%	8%	-1%	**-7%**
Physical & Earth Sciences	10%	15%	8%	**3%**
Social Sciences & Psychology	11%	5%	11%	**-2%**
Other Fields	13%	10%	9%	**5%**

Notes: Not all responding institutions provided data by field of study. See Appendix A for the survey taxonomy.

Sources: CGS International Graduate Admissions Survey, Phase II, 2010 to 2013

Applications by Country/Region of Origin

Since 2004, the *CGS International Graduate Admissions Survey* has collected data on four key sending countries or regions: China, India, South Korea, and the Middle East.[10] China, India, and South Korea were included in the survey since they are the top three countries of origin for international graduate students in the United States, and countries in the Middle East[11] were included because of the geopolitical importance of this region.

In 2012, the list of countries and regions included in the survey was expanded. In addition to collecting aggregate data on the total number of applications to U.S. graduate schools from prospective international students, the survey now collects data on seven specific sending countries (China, India, South Korea, Taiwan, Canada, Mexico, and Brazil) and three regions

[9] See Appendix A for the survey taxonomy.
[10] Prior to 2012, data for Cyprus and Turkey were included with the Middle East, but are now included in Europe.
[11] See footnote 10.

(Africa, Europe, and the Middle East).[12] China, India, South Korea, Taiwan, and Canada are the top five countries of origin for international graduate students in the United States. Collectively, students from these five countries account for about 63% of all non-U.S. citizens on temporary visas attending U.S. graduate schools, according to research from both CGS and the Institute of International Education.[13] Mexico and Brazil are included in the survey since they are the largest sending countries from Central America and South America, respectively. Altogether, the seven countries and three regions included in the *CGS International Graduate Admissions Survey* account for the home countries of about 86% of all international graduate students in the United States. Thus, examining student flows from these countries and regions provides a good indicator of international application trends.

The number of applications from five of the seven sending countries covered by this survey declined between 2012 and 2013 (see Table 2). The largest declines in international applications in 2013 for the seven countries covered by this survey were from South Korea and Taiwan, where applications declined by 15% and 13% respectively. Declines in international applications also occurred from Mexico (-8%), Canada (-5%), and China (-3%). Applications from the remaining two countries, Brazil and India, increased by 25% and 22% respectively. Across the three regions covered by this survey, international applications increased between 2012 and 2013 in Africa (4%) and the Middle East (2%), while in Europe, applications declined by 2%.

In 2013, applications from China declined by three percent, a stark contrast to the double-digit increases over the previous three years. China remains the largest country of origin for international graduate students in the United States. During the 2011-12 academic year, China sent approximately 29% of all international students to U.S. institutions, while India sent about 20%, and Brazil sent about 1% of all international students.[14]

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[12] **Africa** includes Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Côte d'Ivoire (Ivory Coast), Democratic Republic of the Congo (formerly Zaire), Djibouti, Egypt, Eritrea, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Réunion, Rwanda, Sahrawi Arab Democratic Republic, Saint Helena, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe. **Europe** includes: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and Vatican City. The **Middle East** includes: Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, United Arab Emirates, and Yemen.

[13] Allum, J.R. (2012). Findings from the *2012 CGS International Graduate Admissions Survey, Phase III: Final offers of admission and enrollment*. Washington, DC: Council of Graduate Schools; Institute of International Education. (2012). "International Students by Academic Level and Place of Origin, 2011/12." Open Doors Report on International Educational Exchange. Retrieved from Institute of International Education. March 25, 2013. http://www.iie.org/en/Research-and-Publications/Open-Doors/Data

[14] See footnote 13.

Graduate applications from prospective students from India increased 22% in 2013 after increasing 3% last year. Over the past several years, applications from India have fluctuated considerably, with year-to-year changes ranging from a 28% decline in 2004 to a 26% increase in 2006.[15]

Table 2. Change in International Graduate Applications by Country/Region of Origin, 2009 to 2010 through 2012 to 2013

	Final Number of Applications, 2009 to 2010	Final Number of Applications, 2010 to 2011	Final Number of Applications, 2011 to 2012	**Final Number of Applications, 2012 to 2013**
International Total	9%	11%	9%	**2%**
Country of Origin				
China	20%	21%	19%	**-3%**
India	1%	8%	3%	**22%**
South Korea	0%	2%	-1%	**-15%**
Taiwan	--	--	-2%	**-13%**
Canada	--	--	7%	**-5%**
Mexico	--	--	10%	**-8%**
Brazil	--	--	9%	**25%**
Region of Origin				
Africa	--	--	-3%	**4%**
Europe	--	--	7%	**-2%**
Middle East *	20%	16%	11%	**2%**

Note: Not all responding institutions provided data by country/region of origin.

* Prior to 2012, data for Cyprus and Turkey were included with the Middle East, but are now included with Europe.

Sources: CGS International Graduate Admissions Survey, Phase II, 2010 to 2013

Applications by Institutional Control and Carnegie Classification

International applications increased at public institutions but decreased at private, not-for-profit institutions in 2013. Among the survey respondents, international applications increased 4% on average in public institutions and decreased 2% on average in private, not-for-profit institutions in 2013 (see Table 3).[16]

[15] CGS International Graduate Admissions Survey, Phase II, 2006 to 2013.
See http://www.cgsnet.org/benchmarking/international-graduate-admissions-survey for reports.

[16] Of the 277 institutions that provided total applications data for both 2012 and 2013 in this year's *Phase II* survey, 197 were public institutions, 79 were private, not-for profit institutions, and one was a private, for-profit institution.

By Carnegie classification, applications from prospective international graduate students increased 2% on average at doctoral institutions in 2013, compared with the 11% increase that occurred in 2012.[17] International applications increased 11% at master's-focused institutions in 2013, but this is based on a relatively small number of international applications. In the 2013 *Phase II* survey, just 3% of all applications from prospective international students were for admission to master's-focused institutions.

Table 3. Change in International Graduate Applications by Institutional Control and Carnegie Classification, 2010 to 2011 through 2012 to 2013

	Final % Change in Applications 2010 to 2011	Final % Change in Applications 2011 to 2012	**Final % Change in Applications 2012 to 2013**
Total (All Institutions)	11%	9%	**2%**
Public	10%	8%	**4%**
Private, not-for-profit	16%	12%	**-2%**
Doctoral Institutions	11%	10%	**2%**
Public	9%	9%	**4%**
Private, not-for-profit	16%	13%	**-2%**
Master's-Focused Institutions	15%	-5%	**11%**
Public	16%	-5%	**16%**
Private, not-for-profit	12%	-5%	**6%**

Notes: Carnegie classifications are based on the 2010 Carnegie Classification of Institutions of Higher Education. Private, for-profit institutions and institutions classified as specialized or baccalaureate institutions are included in the totals but are not broken out separately.

Sources: CGS International Graduate Admissions Survey, Phase II, 2011 to 2013

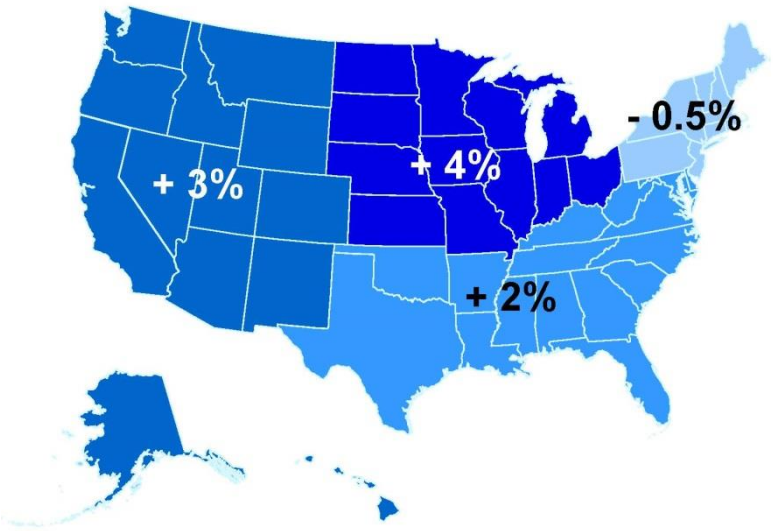
Applications by Geographic Region

Applications to U.S. graduate schools from prospective international students increased in three major regions of the United States in 2013 as shown in Figure 3. International applications

[17] Institutions were coded according to their 2010 Carnegie basic classification. In the analysis, the responding institutions classified as RU/VH: Research Universities (very high research activity), RU/H: Research Universities (high research activity), or DRU: Doctoral/Research Universities were grouped as doctoral institutions. The responding institutions classified as Master's/L: Master's Colleges and Universities (larger programs), Master's/M: Master's Colleges and Universities (medium programs), or Master's/S: Master's Colleges and Universities (smaller programs) were grouped as master's institutions. Responding institutions classified as specialized or baccalaureate institutions were excluded from this particular analysis. Of the 277 institutions that provided total applications data for both 2012 and 2013 in this year's *Phase II* survey, 178 were doctoral institutions, 77 were master's-focused institutions, and 22 were classified as specialized or baccalaureate institutions.

increased 4% in the Midwest, 3% in the West, and 2% in the South. International applications decreased by 0.5% in the Northeast.[18]

Figure 3. Year-to-Year Percent Change in International Applications by Geographic Region, 2012 to 2013



Applications by Number of Graduate Degrees Awarded to International Students

The overall changes in the numbers of applications from prospective international students potentially mask substantial differences between institutions with small and large numbers of international students. To show the variation in trends, CGS reports changes in international applications by the number of graduate degrees awarded to international students. Table 4 displays the changes in international graduate applications from 2012 to 2013 for the responding colleges and universities that are among the 10, 25, 50, and 100 largest in terms of the number of graduate degrees awarded to international students. In addition, data are presented for all responding institutions outside the largest 100. The rankings are based on data from the Integrated Postsecondary Education Data System (IPEDS).[19]

International graduate applications in 2013 increased 1% on average at the responding institutions that are among the 100 largest compared with 3% on average at institutions

[18] Of the 277 institutions that provided total applications data for both 2012 and 2013 in this year's *Phase II* survey, 63 institutions are located in the Northeast, 66 in the Midwest, 97 in the South, and 51 in the West. States were divided into regions as follows: **Midwest** – Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; **Northeast** – Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; **West** – Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; and **South** – Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

[19] See footnote 3 for more information.

outside the largest 100 (see Table 4). This pattern of stronger growth (i.e., smaller declines and larger increases) at institutions awarding smaller numbers of graduate degrees to international students was true on average for applications from prospective students from all countries except China and Taiwan. In contrast, applications from prospective graduate students from China and Taiwan showed smaller declines at those institutions that are among the 100 largest, while applications from Africa and Europe showed the same change (4% and -2% respectively) at both the 100 largest institutions and the institutions outside the largest 100.

Table 4. Change in International Graduate Applications by Country/Region of Origin and Number of Graduate Degrees Awarded to International Students, 2012 to 2013

	All Institutions	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	**2%**	**-1%**	**0%**	**1%**	**1%**	**3%**
Country of Origin						
China	-3%	-4%	-2%	-2%	-3%	-5%
India	22%	16%	16%	19%	22%	25%
South Korea	-15%	-19%	-19%	-17%	-16%	-9%
Taiwan	-13%	-11%	-12%	-12%	-13%	-17%
Canada	-5%	-7%	-7%	-5%	-5%	-4%
Mexico	-8%	0%	-8%	-8%	-8%	-7%
Brazil	25%	18%	21%	19%	22%	34%
Region of Origin						
Africa	4%	6%	1%	3%	4%	4%
Europe	-2%	-5%	0%	-1%	-2%	-2%
Middle East	2%	1%	-1%	1%	1%	4%

Notes: The rankings are based on data collected by the U.S. Department of Education. See footnote 3 for more information. Not all responding institutions provided data by country of origin.

Source: CGS International Graduate Admissions Survey, Phase II, 2013

III. Offers of Admission to Prospective International Graduate Students

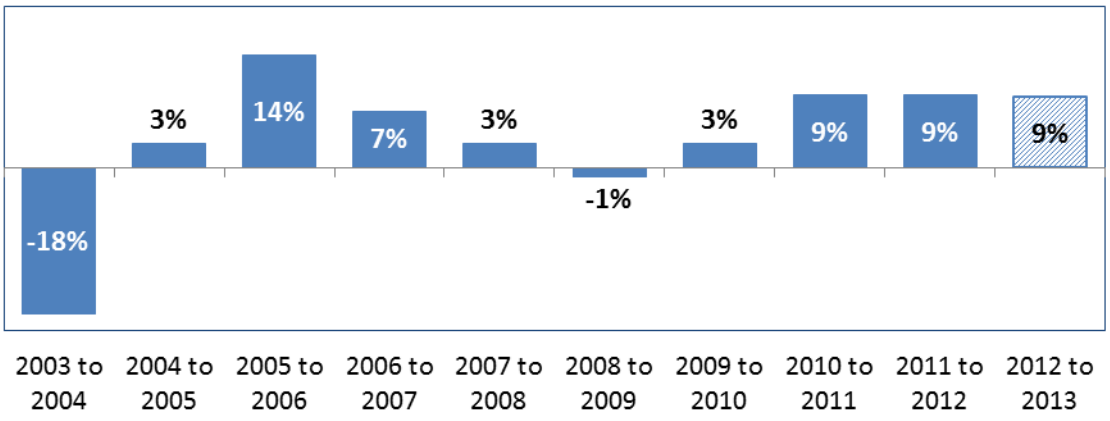
Total Number of Offers of Admission

For prospective international students, initial offers of admission to U.S. graduate programs increased 9% between 2012 and 2013. This year's increase in offers of admission follows a similar 9% gain in 2012 and in 2011, and it marks the fourth consecutive year of gains in international offers of admission (see Figure 4).

The majority of this year's *Phase II* survey respondents reported an increase in offers of admission to prospective international students in 2013. Of the 270 institutions that provided

total offers of admission data for both 2012 and 2013 in this year's *Phase II* survey, 159 (59%) reported an increase in international offers of admission for fall 2013, with an average increase of 16% at these institutions. At the 105 institutions (39%) reporting a decrease, the average decline in international offers of admission was 9%. Six institutions (2%) reported no change in international offers of admission between 2012 and 2013.

Figure 4. Year-to-Year Percent Change in Offers of Admission to Prospective International Students from U.S. Graduate Schools, 2003 to 2004 through 2012 to 2013



Note: Offers of admission data for 2013 are preliminary. All other data points reflect final figures.
Sources: CGS International Graduate Admissions Survey, Phase III, 2004 to 2012, and Phase II, 2013

Offers of Admission by Field of Study

Increases occurred in initial offers of admission in all broad fields of study in 2013, with the exception of life sciences and education, in which offers of admission declined by 4% and 3% respectively between 2012 and 2013, as shown in Table 5.[20] The largest increases in international offers of admission in 2013 occurred in engineering (16%), physical and earth sciences (11%), and 'other' fields (10%). This year's initial 16% increase in engineering follows a 9% gain in 2012, while this year's initial 11% increase in physical and earth sciences follows a 7% gain last year. Furthermore this year's initial 10% increase in 'other' fields follows an 11% gain in 2012. Growth in international offers of admission also occurred in 2013 in arts and humanities (7%), business (3%), and social sciences and psychology (3%).

[20] See Appendix A for the survey taxonomy.

Table 5. Change in International Offers of Admission by Field of Study, 2009 to 2010 through 2012 to 2013

	Final Number of Offers of Admission, 2009 to 2010	Final Number of Offers of Admission, 2010 to 2011	Final Number of Offers of Admission, 2011 to 2012	**Initial Number of Offers of Admission, 2012 to 2013**
International Total	3%	9%	9%	**9%**
Field of Study				
Arts & Humanities	2%	5%	6%	**7%**
Business	3%	11%	21%	**3%**
Education	-5%	7%	12%	**-3%**
Engineering	2%	8%	9%	**16%**
Life Sciences	-5%	7%	0%	**-4%**
Physical & Earth Sciences	8%	11%	7%	**11%**
Social Sciences & Psychology	4%	2%	8%	**3%**
Other Fields	5%	13%	11%	**10%**

Notes: Not all responding institutions provided data by field of study. See Appendix A for the survey taxonomy.

Sources: CGS International Graduate Admissions Survey, Phase III, 2010 to 2012, and Phase II, 2013

Offers of Admission by Country/Region of Origin[21]

Offers of admission to prospective graduate students from China continued to increase much more slowly in 2013 (5%) than the double-digit growth over the past three years (see Table 6). Despite the fact that this year's small gain follows a 20% increase in 2012 and a 21% gain in 2011, 2013 marked the eighth consecutive year of growth for China. Although the growth in offers of admission to students from China in 2013 did not outpace that of all other countries and regions included in the survey as in prior years, in terms of total numbers, offers of admission to Chinese students far outnumber that of other countries and regions. *Phase II* survey results indicated that offers of admission to prospective students from China comprised 40% of all offers of admission to prospective international students.

Offers of admission to prospective students from Brazil increased dramatically in 2013, with a gain of 46%, following a 6% gain in 2012. Offers of admission to prospective students from Brazil comprised only 1% of the total number of offers of admission to prospective international students. Offers of admission to prospective students from India increased by 27% in 2013, following no growth in 2012, and a 2% gain in 2011. This is particularly significant given the fact that the year-to-year increase in offers of admission to prospective international students from

[21] See footnote 8 for a list of the countries included in each region.

India was as low as -14% between 2008 and 2009.[22] Among the other countries and regions included in the survey, growth occurred between 2012 and 2013 in offers of admission to prospective graduate students from the Middle East (12%) and Africa (7%). Offers of admission remained flat for Mexico, following a 6% gain in 2012, and in Europe, following a 2% increase last year. Declines in offers of admission occurred for those students from South Korea (-10%), Taiwan (-3%), and Canada (-1%).

Table 6. Change in International Offers of Admission by Country/Region of Origin, 2009 to 2010 through 2012 to 2013

	Final Number of Offers of Admission, 2009 to 2010	Final Number of Offers of Admission, 2010 to 2011	Final Number of Offers of Admission, 2011 to 2012	**Initial Number of Offers of Admission, 2012 to 2013**
International Total	3%	9%	9%	**9%**
Country of Origin				
China	15%	21%	20%	**5%**
India	-5%	2%	0%	**27%**
South Korea	-7%	-2%	0%	**-10%**
Taiwan	--	--	-4%	**-3%**
Canada	--	--	9%	**-1%**
Mexico	--	--	6%	**0%**
Brazil	--	--	6%	**46%**
Region of Origin				
Africa	--	--	10%	**7%**
Europe	--	--	2%	**0%**
Middle East *	10%	16%	17%	**12%**

Note: Not all responding institutions provided data by country/region of origin.

* Prior to 2012, data for Cyprus and Turkey were included with the Middle East, but are now included with Europe.

Sources: CGS International Graduate Admissions Survey, Phase III, 2010 to 2012, and Phase II, 2013

Offers of Admission by Institutional Control and Carnegie Classification

Initial offers of admission increased in both public institutions and private, not-for-profit institutions in 2013. Among the survey respondents, international offers of admission increased 10% on average in public institutions and 5% on average in private, not-for-profit institutions in

[22] Bell, N.E. (2009). Findings from the 2012 CGS International Graduate Admissions Survey, Phase II: Final applications and initial offers of admission. Washington, DC: Council of Graduate Schools

2013 (see Table 7).[23] This year's gains for private, not-for-profit institutions were much smaller than last year's gain of 14%.

Table 7. Change in International Offers of Admission by Institutional Control and Carnegie Classification, 2010 to 2011 through 2012 to 2013

	Final Change in Offers of Admission, 2010 to 2011	Final Change in Offers of Admission, 2011 to 2012	**Initial Change in Offers of Admission, 2012 to 2013**
Total (All Institutions)	9%	9%	**9%**
Public	8%	7%	**10%**
Private, not-for-profit	11%	14%	**5%**
Doctoral Institutions	9%	9%	**9%**
Public	8%	7%	**11%**
Private, not-for-profit	13%	14%	**6%**
Master's-Focused Institutions	0%	6%	**6%**
Public	11%	-6%	**9%**
Private, not-for-profit	-15%	22%	**4%**

Notes: Carnegie classifications are based on the 2010 Carnegie Classification of Institutions of Higher Education. Private, for-profit institutions and institutions classified as specialized or baccalaureate institutions are included in the totals but are not broken out separately.

Sources: CGS International Graduate Admissions Survey, Phase III, 2011 and 2012, and Phase II, 2013

By Carnegie classification, offers of admission to prospective international graduate students increased 9% on average at doctoral institutions in 2013, following the same gains of 9% increase that occurred in 2012 and 2011.[24] International offers of admission increased 6% at master's-focused institutions in 2013, following a 6% gain in 2012. This year's increase should be interpreted cautiously, however, since it is based on a relatively small number of international offers of admission. In the 2013 *Phase II* survey, just 5% of all offers of admission to prospective international graduate students were for admission to master's-focused institutions.

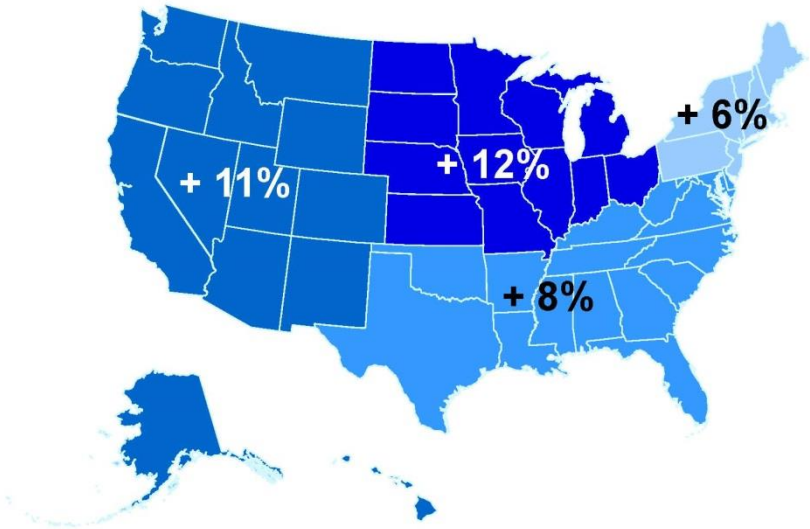
[23] Of the 270 institutions that provided total offers of admission data for both 2012 and 2013 in this year's *Phase II* survey, 192 were public institutions, 77 were private, not-for profit institutions, and one was a private, for-profit institution.

[24] Of the 270 institutions that provided total offers of admission data for both 2012 and 2013 in this year's *Phase II* survey, 175 were doctoral institutions, 74 were master's-focused institutions, and 21 were classified as specialized or baccalaureate institutions.

Offers of Admission by Geographic Region

Initial offers of admission to prospective international graduate students increased in all four major regions of the United States in 2013. International offers of admission increased most on average in the Midwest (12%) and West (11%) in 2013 (see Figure 5). Increases in international offers of admission in 2013 were slightly smaller on average at institutions located in the South (8%) and Northeast (6%).[25]

Figure 5. Year-to-Year Percent Change in International Offers of Admission by Geographic Region, 2012 to 2013



Offers of Admission by Number of Graduate Degrees Awarded to International Students

Increases in initial offers of admission in 2013 were equally strong overall at institutions awarding larger numbers of graduate degrees to international students (i.e., the top 100 institutions) and at institutions awarding smaller numbers of graduate degrees to international students (referred to as "all other" institutions in Table 8).[26] International offers of admission increased 9% on average at the top 100 institutions and at those institutions categorized as "all other" in Table 8.

At the top 100 institutions, stronger increases in offers of admission to prospective graduate students were true, on average, for China, Mexico, and Europe. In contrast, increases in offers of admission to prospective graduate students from Brazil, India, Canada, and Africa were stronger, on average, at those institutions categorized as "all other" in Table 8.

[25] Of the 270 institutions that provided total offers of admission data for both 2012 and 2013 in this year's *Phase II* survey, 60 institutions are located in the Northeast, 66 in the Midwest, 93 in the South, and 51 in the West. See footnote 15 for a list of the states included in each region.
[26] See footnote 3 for more information.

Table 8. Change in International Offers of Admission by Country/Region of Origin and Number of Graduate Degrees Awarded to International Students, 2012 to 2013

	All Institutions	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	**9%**	**2%**	**6%**	**8%**	**9%**	**9%**
Country of Origin						
China	5%	1%	7%	7%	6%	2%
India	27%	11%	18%	23%	25%	34%
South Korea	-10%	-21%	-15%	-12%	-9%	-15%
Taiwan	-3%	4%	3%	3%	0%	-15%
Canada	-1%	-13%	-10%	-4%	-4%	8%
Mexico	0%	15%	11%	8%	2%	-8%
Brazil	46%	7%	6%	13%	17%	135%
Region of Origin						
Africa	7%	2%	4%	2%	3%	12%
Europe	0%	-2%	0%	2%	1%	-5%
Middle East	12%	5%	6%	12%	12%	12%

Notes: The rankings are based on data collected by the U.S. Department of Education. See footnote 3 for more information. Not all responding institutions provided data by country of origin.

Source: CGS International Graduate Admissions Survey, Phase II, 2013

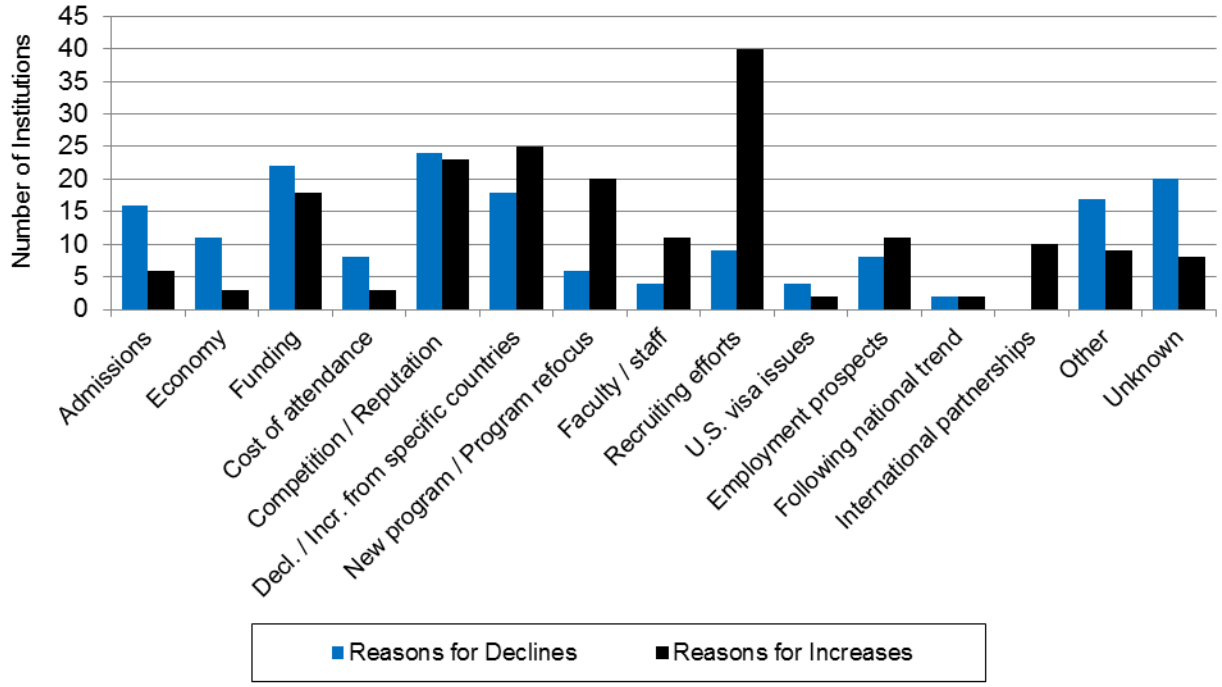
IV. Declines and Increases in International Applications to Graduate Programs

As part of CGS' on-going effort to measure the scope of internationalization in U.S. graduate programs, the *Phase II* survey included questions about graduate programs experiencing large declines or increases in applications from prospective international students, and the factors contributing to the declines or increases. Institutions were able to specify multiple programs by field of study and were able to specify multiple reasons for the declines or increases. Explanation data were coded following the guidelines of the constant comparative method whereby data were categorized based on common themes and keywords within the text. The explanations were categorized into 15 broad categories, which include: admissions, economy, funding, cost of attendance, competition/reputation, declines/increases from specific countries, new program/program refocus, faculty/staff, recruiting efforts, U.S. visa issues, employment prospects, following national trend, international partnerships, other, and unknown.

A total of 157 institutions provided data pertaining to programs that experienced large declines in international applications, and 161 institutions provided data pertaining to programs that experienced large increases in international applications. Among the 157 institutions

responding to the question about large declines in applications to graduate programs, 38 institutions reported no large declines. Among the 161 institutions responding to the question about large increases in applications to graduate programs, 18 institutions reported no large increases. A summary of the responses appears in Figure 6.

Figure 6. Number of Institutions Reporting Reasons for Declines and Increases in Graduate Programs by Field of Study, 2013.



Source: CGS International Graduate Admissions Survey, Phase II, 2013

Explanations for Declines in International Applications

Institutions that reported large declines in international applications to graduate programs gave several reasons for the declines, the most frequently cited being competition/reputation and funding (Figure 6). In the category of competition/reputation, reasons included competition within an institution, with online programs, or with other institutions in the U.S. or internationally. In terms of international competition, one common thread was frequently mentioned: that of expanded access to graduate programs in the home countries of the international students.

Comments in the funding category included uncertainty of financial aid for prospective students and for graduate programs overall, high costs of international recruitment, decrease in federal funding, and the fact that some fields of study did not allow funding for international students. Comments in the admission category included caps on enrollments, increasing of admission standards, smaller numbers of applications because the deadline for admission was moved

earlier in the year, and applicants not being able to meet existing thresholds for standardized tests (i.e., GMAT, GRE, TOEFL/IELTS) or GPA. In some cases, institutions linked the decline in applications to an increase in incomplete or late applications.

Comments in the economy category included impacts from the U.S. economic situation, global economic stagnation, and slowing economies in Asia, in general, and in China, more specifically. In addition, fewer applications from specific countries were noted as well (the declines/increases from specific countries category). China was most frequently mentioned in this category, and Saudi Arabia, India, and Taiwan were also mentioned. Comments in the cost of attendance category included increased tuition and fees for graduate programs. Increased cost was also linked to the decline in the U.S. dollar exchange rates.

Comments in the new program/program refocus category included the realignment or discontinuation of programs, or changes in programs that prevented international student enrollments. Comments in the U.S. visa issues category included concerns about the difficulty in obtaining visas for school as well as for post-graduation employment. Along the lines of employment prospects (employment prospects category), institutions noted a decline U.S. employers investing in helping international workers obtain visas, as well as a decline in jobs in some fields of study, and students' concerns that their choice of major could hamper their ability to get a job or earn enough money to pay their college loans.

In the recruiting efforts category, institutions cited lack of support from the graduate school, limited budgets for recruitment activities, and a focus on domestic recruitment over international recruitment. In the faculty/staff category, comments included a reduction in faculty and staff to support graduate education, and in some cases the departure of international faculty who had attracted international students to the program.

Explanations for Increases in International Applications

Institutions that reported large increases in international applications to graduate programs gave several reasons for the increases, the most frequently cited being recruiting efforts, increases from specific countries, and competition/reputation (Figure 6). In the category of recruiting efforts, reasons included overall increased recruiting activities, including targeted recruiting in specific countries or for specific programs, promotion of international programs, aggressive recruiting by the enrollment office, recruitment tables at conferences, improved student outreach, and using independent consultants who match students with appropriate institutions.

In addition, more applications from specific countries were noted as well (the declines/increases from specific countries category). India and Saudi Arabia were most frequently mentioned in this category, and Brazil, China, Egypt, Iraq, Iran, Mexico, the Middle East, and Africa were also mentioned.

Comments in the competition/reputation category included the increased visibility and reputation of the program, recognized accreditation, marketing efforts to raise the profile of the program to international students, success of international alumni, uniqueness and relevance of programs, and employer demand of graduates from the program.

Comments in the admissions category included the adjustment of application deadlines that resulted in earlier offers, streamlined application processing, acceptance of deferred international applications until applicants meet the English proficiency requirement, low English proficiency test score requirements, and no longer requiring an external evaluation of international documents.

Comments in the economy category included an emphasis on economic globalization, and the improvement of economies in other parts of the world that have enabled families to send their children to graduate schools in the U.S. Comments in the funding category included availability of funding for assistantships, increased support for students on research grants, an increase in sponsorship by external sources such as international governments, sponsors from a variety of industries, and external funding organizations (e.g., Brazil without Borders, Mastercard Foundation fellowships).

Comments in the cost of attendance category included favorable tuition rates compared to other countries in conjunction with high rates of graduate employment. Comments in the new program/program refocus category primarily linked the increase in applications to the existence of new programs, or to the redesign of existing programs to reflect new technologies, methods, and information. Comments in the faculty/staff category included change in leadership, collaborative work by faculty with companies and universities overseas, and faculty outreach to prospective students.

Comments in the international partnerships category included increased ties between academic institutions as well as academic-industry partnerships, cooperative agreements with other institutions, connections with external international funding partners, and opening of a new center overseas.

Comments in the employment prospects category included home country demand for graduates with degrees in specific fields, high rates of post-graduation employment, and programs providing graduates with strong core competencies and skillsets in leading-edge technologies. Comments in the U.S. visa issues category included increased caps for H-1B visas and that visas would more likely be approved in certain disciplines.

V. Summary and Conclusions

Summary

International Applications

The results of the *2013 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* reveal that applications to U.S. graduate schools from prospective international students increased 2% between 2012 and 2013, the eighth consecutive year of gains. This year's increase follows a 9% gain in 2012 and an 11% increase in 2011. International applications increased in all broad fields of study in 2013, with the exception of education, life sciences, and social sciences and psychology, in which applications fell 2%, 7%, and 2% respectively between 2012 and 2013. The largest increase in international applications in 2013 occurred in engineering and 'other' fields, with each field reporting 5% increases.

Applications from prospective graduate students from five of the seven sending countries covered by this survey declined between 2012 and 2013, while applications from the remaining two countries, Brazil and India, increased by 25% and 22% respectively. The largest declines in international applications in 2013 for the seven countries and three regions covered by this survey were from South Korea and Taiwan, where applications declined by 15% and 13% respectively. Declines in international applications also occurred from Mexico (-8%), Canada (-5%), and China (-3%). Across the three regions covered by this survey, international applications increased between 2012 and 2013 in Africa (4%) and the Middle East (2%), while in Europe, applications declined by 2%.

International applications increased 4% on average in public institutions and decreased 2% on average in private, not-for-profit institutions in 2013. By Carnegie classification, graduate applications from prospective international students increased 2% on average at doctoral institutions, and increased 11% at master's-focused institutions in 2013. International graduate applications in 2013 increased 1% on average at the responding institutions that are among the 100 largest in terms of graduate degrees awarded to international students compared with 3% on average at institutions outside the largest 100.

International Offers of Admission

For prospective international students, initial offers of admission to U.S. graduate programs increased 9% between 2012 and 2013. This year's increase in offers of admission follows a similar 9% gain in 2012 and in 2011, and it marks the fourth consecutive year of gains in international offers of admission. Increases occurred in international offers of admission in all broad fields of study in 2013, with the exception of life sciences and education, in which offers of admission declined by 4% and 3% respectively between 2012 and 2013. The largest increases in international offers of admission in 2013 occurred in engineering (16%), physical and earth sciences (11%), and 'other' fields (10%).

Offers of admission to prospective graduate students from China continued to increase much more slowly in 2013 (5%) than the double-digit growth over the past three years. This year's small gain follows a 20% increase in 2012 and a 21% gain in 2011, marking 2013 as the eighth consecutive year of growth for China. Offers of admission to prospective students from Brazil increased 46% in 2013, following a 6% gain in 2012. Offers of admission to prospective students from India increased by 27% in 2013, following no growth in 2012. Among the other countries and regions included in the survey, growth occurred between 2012 and 2013 in offers of admission to prospective graduate students from the Middle East (12%) and Africa (7%). Offers of admission remained flat for Mexico and Europe, and declines in offers of admission occurred for those students from South Korea (-10%), Taiwan (-3%), and Canada (-1%).

International offers of admission increased in both public institutions and private, not-for-profit institutions in 2013, by 10% and 5% respectively. By Carnegie classification, offers of admission to prospective international graduate students increased 9% on average at doctoral institutions and by 6% at master's-focused institutions in 2013. International offers of admission increased 9% on average at the responding institutions that are among the 100 largest in terms of graduate degrees awarded to international students and at the institutions outside the largest 100.

Conclusions

The data from the *2013 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* indicate that the participation of international students in U.S. graduate education remains strong. Although the 2% growth in the number of applications in 2013 was much lower than the 9% and 11% gains in 2012 and 2011, the increase in the initial offers of admissions remained steady at 9% for the third year in a row.

The increase in the overall number of initial offers of admission to U.S. graduate schools was driven by a 27% increase in offers of admission to prospective students from India, a sharp turn upward following the previous year, in which there was no change in offers of admission to prospective students from that country. Offers of admission also grew by 5% to prospective students from China, even though there was a 3% decline in the number of applications from that country. The data for fall 2013 marks the eighth year in a row of increases in the number of offers of admission for prospective Chinese students. Offers of admission to students from the Middle East rose 12%, marking the sixth year of growth, and offers of admission to Brazilian students rose 46%.

The *Phase II* survey included questions about graduate programs experiencing large increases and declines in applications from prospective international students, and the factors contributing to these declines and increases. Although survey questions were not asked in a way that could pinpoint the specificities of increases or declines in applications among prospective graduate students from other countries (e.g., by program, country of origin, etc.), they resulted in 15 broad categories of explanations, and offered some insights into the state of international graduate student enrollment at U.S. institutions.

Some explanations, such as global economic changes, immigration and visa policies, and the availability and uncertainty of federal funding as a result of the sequestration, are beyond the control of graduate deans. Other explanations were used to describe very different outcomes. For instance, decisions to reorganize academic departments was blamed for decreases in international graduate applications by some survey respondents, and credited for increases by other survey respondents. Similarly, although several respondents indicated that they moved admissions deadlines to earlier dates, some found that the decision led to decreases in international graduate applications, while others believed that the decision increased the number of international graduate applications because offers could be made sooner to applicants.

With respect to explanations for declines in applications, there were some common themes, aside from disadvantageous economic conditions and visa policies noted above. **Competition** from within institutions (i.e., competition between programs) and from beyond institutions (i.e., competition from other institutions, online programs) was mentioned by a number of respondents. The fact that prospective graduate students have access to programs in their home countries was of particular concern. **Student supply and demand** was also described as a possible explanation for declines in applications from prospective international graduate students. Some respondents indicated that there was a decreasing number of qualified students, due to either/or increased selectivity and/or the inability of prospective international graduate students to meet standardized test score thresholds. On the demand side, some respondents suggested that prospective international graduate students are deciding to defer enrollment in graduate school because of a lackluster post-graduate job market. **Funding and support** was a third category of reasons why applications from prospective international graduate students declined in 2013. Specific explanations ranged from the limited availability and uncertainty of funding, to the high cost of graduate education; from the high cost of recruiting international students, to the fact that some institutions place priorities on meeting the needs of prospective domestic students over prospective international students. Finally, **administration and organizational obstacles** were described as factors contributing to declines in prospective international graduate student applications. Survey respondents described faculty and staff loss and reductions, particularly among those with connections to key sending nations, as being problematic. Changes in leadership, organization, and program offerings, particularly when programs are discontinued, appear to impact the number of applications from prospective international students as well. Finally, some institutions reported that the decision to move admissions deadlines "up" led to fewer applications, as well as greater numbers of incomplete or late applications.

Survey respondents also offered explanations for increases in applications from prospective international graduate students that were considerably different from the factors likely contributing to declines in applications. **Proactive development of niche programs** was one of the most common themes emerging from respondents experiencing increases in applications from prospective international graduate students. This specifically pertains to the development of new programs and the revision of existing programs in ways that respond to technological

innovations, workforce demands, and specific countries and programs. Establishing a **strong value proposition**, one that is founded on high-quality programs that deliver strong core competencies, and have an established track record for securing post-graduation employment for graduates, was another related factor in contributing to increases in applications from prospective international graduate students. Survey respondents also described a **range of networks** that were used to raise the visibility of programs and recruit prospective international graduate students, including consultants, student outreach services, alumni, and faculty. Increases in applications from prospective international graduate students was also made possible, according to some survey respondents, by utilizing a **range of funding sources** to support international students, including the U.S. government, other national governments, industries, and external funding organizations. Finally, many survey respondents indicated that **administration and organizational decisions** could be used to attract prospective international graduate students. Some respondents changed admissions deadlines to earlier points in time and streamlined admissions processes enabling them to make early offers to prospective international graduate students, while others chose to deferring enrollment to those students who had not yet met certain standards, such as English proficiency. Some survey respondents exploited faculty connections with other countries to improve curricula, recruiting, and research. Finally, some respondents indicated that leadership and organizational decisions could be made in ways that made international students a priority.

The results of the *Phase II* survey are an early indicator that international first-time enrollment is likely to exhibit continued growth in fall 2013. However, it will be important to continually monitor the state of the global and U.S. economy, competition from other countries, the increasing cost of graduate education in the United States, and changes in federal funding for research. Future *CGS International Graduate Admissions Surveys* will continue to track the participation of international students in U.S. graduate programs, and provide early indicators of possible shifts in international applications, offers of admission, and enrollment.

Appendix A
Survey Questionnaire and Taxonomy of Fields of Study

2013 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission

Institution ID: _____

Institution Name: _____

Name of Individual Completing the Survey: _____

Phone Number: _____ E-mail: _____

A. Please provide the *final* number of applications received by your graduate school from prospective international students for Fall 2012 and Fall 2013. In addition, please provide the number of offers of admission granted to prospective international graduate students for Fall 2012 and Fall 2013 as of *June 4th or the same date each year*. See pages 3-9 for instructions, definitions and taxonomy.

I. Total Non-U.S. Citizens		**2012**	**2013**
(see definition on page 3)	Applications		
	Offers of Admission		

II. Non-U.S. Citizens from Select Countries/Regions of Origin		**2012**	**2013**
Countries *(see definitions on page 4)*			
China	Applications		
	Offers of Admission		
India	Applications		
	Offers of Admission		
South Korea	Applications		
	Offers of Admission		
Taiwan	Applications		
	Offers of Admission		
Canada	Applications		
	Offers of Admission		
Mexico	Applications		
	Offers of Admission		
Brazil	Applications		
	Offers of Admission		
Regions *(see definitions on page 4)*			
Africa	Applications		
	Offers of Admission		
Europe	Applications		
	Offers of Admission		
Middle East	Applications		
	Offers of Admission		

(Continued on page 2)

III. Total Non-U.S. Citizens by Field of Study *(see taxonomy on page 6)*		**2012**	**2013**
Arts & Humanities	Applications		
	Offers of Admission		
Business	Applications		
	Offers of Admission		
Education	Applications		
	Offers of Admission		
Engineering	Applications		
	Offers of Admission		
Life Sciences	Applications		
	Offers of Admission		
Physical & Earth Sciences *(including Math & Computer Sci.)*	Applications		
	Offers of Admission		
Social Sciences & Psychology	Applications		
	Offers of Admission		
Other Fields	Applications		
	Offers of Admission		

B. Earlier this year, the *CGS International Graduate Admissions Survey, Phase I: Applications* revealed that applications from prospective international students to U.S. graduate schools increased by only 1% between 2012 and 2013, the smallest rate of growth in eight years. We would like your input on a few questions to help us understand the possible explanations for these changes.

1. **In which graduate programs has your institution experienced particularly large DECLINES in applications from prospective international students for enrollment between Fall 2012 and Fall 2013? If none of your programs experienced large declines, please proceed to question 3.**

2. **Generally speaking, why do you think these declines have occurred?**

3. **In which graduate programs has your institution experienced particularly large INCREASES in applications from prospective international students for enrollment between Fall 2012 and Fall 2013? If none of your programs experienced large increases, please leave question 3 and 4 blank.**

4. **Generally speaking, why do you think these increases have occurred?**

Questions?

If you have problems submitting your survey form electronically, please contact Jeannette Remington, Program Manager, at (202) 461-3860 or jremington@cgs.nche.edu. For all other questions, please contact Leila Gonzales, Manager of Surveys and Information Services, at (202) 461-3886 or lgonzales@cgs.nche.edu.

SURVEY INSTRUCTIONS AND DEFINITIONS

About the Survey

The *2013 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* is sent to all U.S. colleges and universities that are members of the Council of Graduate Schools (CGS) as of May 2013. The survey asks institutions to report the final numbers of completed application for admission to graduate certificate and graduate degree programs from prospective international students and the initial offers of admission granted to prospective international students. The three-part *International Graduate Admissions Survey* has been conducted annually by CGS since 2004. Survey reports are available online at www.cgsnet.org.

The survey response deadline is Thursday, July 18, 2013.

Confirmation of receipt: You will receive e-mail verification from CGS that your survey was received from CGS within two business days. If you do not receive this e-mail confirmation, please contact Jeannette Remington at jremington@cgs.nche.edu or (202) 461-3860.

Contact Information: If you have problems submitting your survey electronically, please contact Jeannette Remington, Program Manager, at jremington@cgs.nche.edu or (202) 461-3860. For all other questions, please contact Leila Gonzales, Manager of Surveys and Information Services, at lgonzales@cgs.nche.edu or (202) 461-3886.

Confidentiality

All data and information submitted for the *CGS International Graduate Admissions Survey* will be treated as confidential and will only be used for research or statistical purposes by CGS. 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 the data collection and analysis. Participation in the *CGS International Graduate Admissions Survey* is voluntary.

Survey Instructions and Definitions (for Part A):

- **Applications:** The *Phase II* survey collects final data on completed applications, not applicants (i.e., counts of pieces of paper rather than counts of unique students). If a student applied to more than one graduate program, all of the individual application should be counted and included in our survey data. Include data for all individuals who have fulfilled your institution's requirements to be considered for admissions, including payment or waiving of the application fee, if any.

- **Offers of admission:** Please provide data on offers of admission to prospective international students for Fall 2012 and Fall 2013 as of the same date each year. For example, if you provide data for Fall 2012 offers of admission as of 6/4/12, provide Fall 2013 offers of admission data as of 6/4/13. Since we are measuring changes in offers of admission from year to year, it is important that we compare data from the same point in time each year. You may use a date other than June 4th, provided that you use the same month and day for each year.

- **Only report data for non-U.S. citizens on temporary visas.** Non-U.S. citizens are students or prospective students who are not citizens, nationals, or permanent residents of the United States. These individuals will be expected to be in the United States on a student visa, or on a temporary basis, and do not have the legal right to remain indefinitely. Students or prospective students from Puerto Rico, Guam, the U.S. Virgin Islands, or other U.S. territories are considered citizens of the United States and thus should not be included in the survey data. Undocumented students (i.e., illegal aliens) should not be included in the survey data.

- When provided data for Section I, "Total Non-U.S. Citizens," include non-U.S. citizens on temporary visas from ***all*** countries and regions or origin, not just those listed in Section II.

- Please provide data for all international students applying for admission or admitted to graduate certificate master's degree, education specialist, and doctoral degree programs offered by **ALL** divisions, schools, colleges, or departments of your institution. See the next two bullets for the programs to include and those that should be excluded. Each institution should submit one survey combining the data from all divisions, schools, colleges, and/or departments.

- **Data to include:** Include data for all international students applying for admission or admitted to graduate certificate and degree programs. At the master's level, include data for all students applying for admission or admitted to all master of science (M.S.) and master of arts (M.A.) programs, as well as data for students applying for admission or admitted to other master's programs in such areas as business (e.g., M.B.A.), fine arts (e.g., M.F.A.), health sciences (e.g., M.P.H.), public administration (e.g., M.P.A), public policy (e.g., M.P.P.), and social work (e.g., M.S.W.), among other master's programs. At the doctoral level, include data for students applying for admission or admitted to all doctoral programs such as Ph.D., Ed.D., D.B.A., D.F.A., and Psy. D., among others. Include data for students applying for admission or admitted to graduate certificate programs (including post-baccalaureate and post-master's certificate programs) or other graduate programs (e.g., Ed.S).

- **Data to exclude:** Do not include data for non-degree students or for visiting or exchange scholars. Do not include data for students applying for admission or admitted to undergraduate-level or first-professional degree programs. First-professional degree programs include Chiropractic (D.C. or D.C.M.), Dentistry (D.D.S. or D.M.D.), Law (L.L.B., J.D.), Medicine (M.D.), Optometry (O.D.), Osteopathic Medicine (D.O.), Pharmacy (Pharm.D.), Podiatry (D.P.M., D.P., or Pod.D.), Theology (M.Div., M.H.L., B.D., or Ordination), and Veterinary Medicine (D.V.M.). Please note that this list of first-professional degree programs is comprehensive. Data for all other professional programs, including business and all health-related fields not listed above (e.g. D.P.T. and D.N.P.), should be included in your survey data.

- When providing data for Section II, "Non-U.S. Citizens from Select Countries/Regions of Origin," only include graduate-level data for non-U.S. citizens on temporary visas. **NOTE:** The sum of the numbers provided for the ten countries/regions of origin will likely NOT equal the total provided in Section I, "Total Non-U.S. Citizens," since Section I includes applications from and offers of admission to students from all countries and regions of origin, not just the ten listed in Section II.

- **China** refers to the People's Republic of China (i.e. mainland China) and excludes Hong Kong, Macau, Taiwan, etc.

- **Africa** includes Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Côte d'Ivoire (Ivory Coast), Democratic Republic of the Congo (formerly Zaire), Djibouti, Egypt, Eritrea, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Réunion, Rwanda, Sahrawi Arab Democratic Republic, Saint Helena, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe.

- **Europe** includes: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and Vatican City. **NOTE:** Do not include data for Kazakhstan with Europe.

- **Middle East includes:** Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, United Arab Emirates, and Yemen. **NOTE:** Prior to 2012, data for students from Cyprus and Turkey were included with this region, but starting in 2012, those data should be reported with the data for Europe.

- When providing data for Section III, “Total Non-U.S. Citizens by Field of Study,” only include graduate-level data for non-U.S. citizens on temporary visas. **NOTE:** The sum of the numbers provided for the eight fields of study SHOULD equal the total provided in Section I, “Total Non-U.S. Citizens.” As a reminder, the Phase II survey collects data on applications, not applicants. If a student applied to graduate programs in more than one broad field, both applications should be counted and included in your survey data, in both Section I and Section III.

- The survey taxonomy and CIP crosswalk are included on pages 6-9. Please note that the taxonomy is based on the taxonomy used for the annual CGS/GRE Survey of Graduate Enrollment and Degrees.

- When completing the survey, please enter a “0” (zero) in fields when appropriate, e.g., when no international students in that field of study or from that country/region have applied for admission or were offered admission, or if your institution does not offer programs in a certain field of study. Fields should be left blank only when data are not available.

- **Submission instructions:** After filling in all fields, please click the “Submit Form” button located in the right-hand corner of the document window. A new window will appear in Adobe title “Send Form.” Enter your e-mail address and your name. Hit the “send” button in the bottom right-hand corner of the dialogue box. Forms cannot be completed and sent through the “Preview” function on Mac computers. You must open the form in Adobe or Adobe Reader. If you are unable to submit using the “Submit Form” button, please send completed surveys as an attachment to CGS Research at research@cgs.nche.edu. We prefer to receive the survey data electronically, but if you are unable to submit via e-mail, please print the completed form and fax it to 202-331-7157.

SURVEY TAXONOMY

ARTS AND HUMANITIES

Arts – History, Theory, and Criticism
- Art History, Criticism, and Conservation
- Ethnomusicology
- Music History, Literature, and Theory
- Musicology
- Theatre Literature, History and Criticism
- Arts – History, Theory, and Criticism, Other

Arts – Performance and Studio
- Arts, Entertainment, and Media Management
- Crafts/Craft Design
- Dance
- Design and Applied Arts
- Drama/Theatre Arts
- Film/Video and Photographic Arts
- Fine and Studio Arts
- Music
- Arts – Performance and Studio, Other

English Language and Literature
- American Literature
- English Language and Literature
- English Literature
- Rhetoric and Composition/Writing Studies
- English Language and Literatures, Other

Foreign Languages and Literatures
- African Languages and Literatures
- American Sign Language
- Asiatic Languages and Literatures
- Celtic Languages and Literatures
- Classics and Classical Languages and Literatures
- Germanic Languages and Literatures
- Iranian/Persian Languages and Literatures
- Modern Greek Language and Literature
- Romance Languages and Literatures
- Slavic, Baltic, and Albanian Languages and Literatures
- Foreign Languages and Literatures, Other

History
- American History
- European History
- History and Philosophy of Science and Technology
- History, General
- History, Other

Philosophy
- Ethics
- Logic
- Philosophy
- Philosophy, Other

Arts and Humanities, Other
- Linguistic, Comparative, and Related Language Studies and Services
- Humanities/Humanistic Studies
- Liberal Arts and Sciences/Liberal Arts
- Arts and Humanities, Other

BUSINESS

Accounting
- Accounting
- Auditing
- Taxation

Banking and Finance
- Banking and Financial Support Services
- Credit Management
- Financial Planning and Services
- International Finance
- Investments and Securities
- Public Finance

Business Administration and Management
- Business Administration and Management
- Business Operations
- Business/Commerce, General
- Construction Management
- E-Commerce
- Entrepreneurship
- Hospitality Administration/ Management
- Human Resources Development
- Human Resources Management
- Labor and Industrial Relations
- Logistics and Supply Chain Management
- Operations Management
- Organizational Leadership
- Organizational Management
- Project Management
- Small Business Operations
- Sport and Fitness Administration/Management
- Telecommunications Management
- Business Administration and Management, Other

Business, Other
- Business Statistics
- Business/Corporate Communications
- Business/Managerial Economics
- Insurance
- International Business
- Management Information Systems
- Management Science
- Marketing
- Marketing Management
- Merchandising
- Real Estate
- Sales
- Business Fields, Other

EDUCATION

Education Administration
- Educational Administration
- Educational Leadership
- Educational Supervision

Curriculum and Instruction
- Curriculum and Instruction

Early Childhood Education
- Early Childhood Education and Teaching
- Kindergarten/Preschool Education and Teaching

Elementary Education
- Elementary Education and Teaching
- Elementary-Level Teaching Fields

Educational Assessment, Evaluation, and Research
- Educational Assessment, Testing, and Measurement
- Educational Evaluation and Research
- Educational Psychology
- Educational Statistics and Research Methods
- Learning Sciences
- School Psychology

Higher Education
- Higher Education
- Higher Education Administration

Secondary Education
- Secondary Education and Teaching
- Secondary-Level Teaching Fields

Special Education
- Education/Teaching of Students w/ Specific Disabilities
- Education/Teaching of Students w/ Specific Learning Disabilities
- Education/Teaching of the Gifted and Talented
- Special Education and Teaching
- Other Special Education Fields

Student Counseling and Personnel Services
- College Student Counseling and Personnel Services
- Counselor Education
- School Counseling and Guidance Services
- Student Counseling and Personnel Services, Other

Education, Other
- Adult and Continuing Education
- Bilingual, Multilingual, and Multicultural Education
- Education, General
- Educational/Instructional Media Design
- Health and Physical Education
- International and Comparative Education
- Junior High/Middle School Education and Teaching
- Outdoor Education
- Social and Philosophical

- Foundations of Education
- Teaching English as a Second or Foreign Language
- Other Education Fields

ENGINEERING

- **Chemical Engineering**
  - Chemical and Biomolecular Engineering
  - Chemical Engineering
- **Civil Engineering**
  - Architectural Engineering
  - Civil Engineering
  - Construction Engineering
  - Environmental/Environmental Health Engineering
  - Geotechnical and Geoenvironmental Engineering
  - Structural Engineering
  - Surveying Engineering
  - Transportation and Highway Engineering
  - Water Resources Engineering
- **Computer, Electrical, and Electronics Engineering**
  - Computer Engineering
  - Computer Hardware Engineering
  - Computer Software Engineering
  - Electrical Engineering
  - Electronics Engineering
  - Laser and Optical Engineering
  - Telecommunications Engineering
- **Industrial Engineering**
  - Industrial Engineering
  - Manufacturing Engineering
  - Operations Research
- **Materials Engineering**
  - Ceramic Sciences & Engineering
  - Materials Engineering
  - Materials Science
  - Metallurgical Engineering
  - Polymer/Plastics Engineering
- **Mechanical Engineering**
  - Engineering Mechanics
  - Mechanical Engineering
- **Engineering, Other**
  - Aeronautical Engineering
  - Aerospace Engineering
  - Agricultural Engineering
  - Biochemical Engineering
  - Biomedical/Medical Engineering
  - Electromechanical Engineering
  - Engineering Chemistry
  - Engineering Physics
  - Engineering Science
  - Forest Engineering
  - Geological/Geophysical Engineering
  - Mining and Mineral Engineering
  - Naval Architecture and Marine Engineering
  - Nuclear Engineering
  - Ocean Engineering
  - Paper Science and Engineering
  - Petroleum Engineering
  - Systems Engineering
  - Textile Sciences and Engineering
  - Engineering, Other

LIFE SCIENCES

- **Agriculture, Natural Resources, and Conservation**
  - Agricultural and Domestic Animal Services
  - Agricultural and Food Products Processing
  - Agricultural Business and Management
  - Agricultural Economics
  - Agricultural Mechanization
  - Agricultural Production
  - Agricultural Public Services
  - Agriculture, General
  - Agronomy
  - Animal Sciences
  - Applied Horticulture
  - Fishing and Fisheries Sciences and Management
  - Food Science and Technology
  - Forestry
  - Horticultural Business Services
  - International Agriculture
  - Natural Resources and Conservation
  - Natural Resources Management and Policy
  - Parks, Recreation, and Leisure Facilities Management
  - Parks, Recreation, and Leisure Studies
  - Plant Sciences
  - Soil Sciences
  - Wildlife and Wildlands Science and Management
  - Agriculture, Natural Resources, and Conservation, Other
- **Biological and Biomedical Sciences**
  - Anatomical Sciences
  - Animal Biology
  - Bacteriology
  - Biochemistry
  - Bioinformatics
  - Biology, General
  - Biomathematics
  - Biometry
  - Biophysics
  - Biotechnology
  - Botany/Plant Biology
  - Cell/Cellular Biology
  - Computational Biology
  - Developmental Biology
  - Ecology
  - Entomology
  - Epidemiology
  - Evolution
  - Genetics
  - Immunology
  - Microbiological Sciences
  - Molecular Biology
  - Molecular Medicine
  - Neurosciences
  - Parasitology
  - Pathology
  - Pharmacology
  - Physiology
  - Population Biology
  - Systematics
  - Toxicology
  - Zoology
  - Biological and Biomedical Sciences, Other
- **Health and Medical Sciences**
  - Allied Health
  - Alternative and Complementary Medicine
  - Audiology
  - Bioethics/Medical Ethics
  - Chiropractic (excluding D.C. and D.C.M.)
  - Clinical/Medical Laboratory Science/Research
  - Communication Disorders Sciences and Services
  - Dentistry and Oral Sciences (excluding D.D.S. and D.M.D.)
  - Dietetics and Clinical Nutrition Services
  - Environmental Health
  - Exercise Science
  - Health and Medical Administrative Services
  - Health Sciences
  - Health/Medical Preparatory Pgms.
  - Kinesiology
  - Medical Sciences (excluding M.D.)
  - Mental and Social Health Services
  - Nursing
  - Nutrition Sciences
  - Occupational Therapy
  - Optometry (excluding O.D.)
  - Osteopathic Medicine (excluding D.O.)
  - Pharmaceutical Sciences (excluding Pharm.D.)
  - Physical Therapy
  - Physician Assistant
  - Podiatry (excluding D.P.M., D.P. and Pod.D.)
  - Public Health
  - Rehabilitation and Therapy
  - Speech-Language Pathology
  - Veterinary Biomedical and Clinical Science
  - Veterinary Medicine (excluding D.V.M.)
  - Health and Medical Sciences, Other

PHYSICAL AND EARTH SCIENCES

- **Chemistry**
  - Analytical Chemistry
  - Chemical Plastics
  - Chemistry, General
  - Environmental Chemistry
  - Forensic Chemistry
  - Inorganic Chemistry
  - Medicinal and Pharmaceutical Chemistry
  - Organic Chemistry
  - Physical Chemistry

- Polymer Chemistry
- Theoretical Chemistry
- Chemistry, Other

Computer & Information Sciences
- Computer and Information Sciences, General
- Computer Programming
- Computer Science
- Computer Software and Media Applications
- Computer Systems Analysis
- Computer Systems Networking and Telecommunications
- Computer/Information Technology Administration and Management
- Data Processing
- Information Sciences/Studies
- Microcomputer Applications
- Computer and Information Sciences, Other

Earth, Atmospheric & Marine Sciences
- Aquatic Biology/Limnology
- Atmospheric Sciences
- Biological Oceanography
- Earth Sciences
- Geochemistry
- Geological Sciences
- Geophysics and Seismology
- Geosciences
- Hydrology
- Marine Biology
- Marine Sciences
- Meteorology
- Oceanography
- Paleontology
- Earth, Atmospheric, and Marine Sciences, Other

Mathematical Sciences
- Actuarial Science
- Applied Mathematics
- Mathematics
- Probability
- Statistics
- Mathematical Sciences, Other

Physics & Astronomy
- Acoustics
- Astronomy
- Astrophysics
- Atomic/Molecular Physics
- Condensed Matter and Materials Physics
- Elementary Particle Physics
- Nuclear Physics
- Optics/Optical Sciences
- Physics
- Planetary Astronomy and Science
- Plasma and High-Temperature Physics
- Solid State Physics
- Theoretical and Mathematical Physics
- Physics and Astronomy, Other

Physical Sciences, Other
- Physical Sciences, General
- Science Technologies
- Physical Sciences, Other

SOCIAL SCIENCES & PSYCHOLOGY

Anthropology and Archaeology
- Anthropology
- Archaeology

Economics
- Applied Economics
- Econometrics
- Economics
- International Economics

Political Science
- International Relations
- Political Science and Government
- Public Policy Analysis

Psychology
- Applied Psychology
- Clinical Psychology
- Cognitive Psychology
- Community Psychology
- Comparative Psychology
- Counseling Psychology
- Developmental and Child Psychology
- Experimental Psychology
- Forensic Psychology
- Industrial and Organizational Psychology
- Personality Psychology
- Physiological Psychology
- Psycholinguistics
- Psychology, General
- Psychometrics
- Psychopharmacology
- Quantitative Psychology
- Research and Experimental Psychology
- Social Psychology
- Psychology, Other

Sociology
- Demography
- Rural Sociology
- Sociology

Social Sciences, Other
- Adult Development and Aging
- Area, Ethnic, Cultural, Gender, and Group Studies
- Criminal Justice/Criminology
- Geography and Cartography
- Gerontology
- Social Sciences, General
- Urban Studies/Affairs
- Social Sciences, Other

OTHER FIELDS

Architecture and Environmental Design
- Architectural History and Criticism
- Architectural Sciences and Technology
- Architecture
- City/Urban, Community and Regional Planning
- Environmental Design
- Interior Architecture
- Landscape Architecture
- Real Estate Development
- Architecture and Environmental Design, Other

Communications and Journalism
- Advertising
- Communication and Media Studies
- Communications Technologies
- Journalism
- Mass Communication
- Public Relations
- Publishing
- Radio, Television, and Digital Communication
- Speech Communication
- Communications and Journalism, Other

Family and Consumer Sciences
- Apparel and Textiles
- Family and Consumer Economics
- Family and Consumer Sciences
- Family Studies
- Foods, Nutrition, and Wellness Studies
- Housing and Human Environments
- Human Development
- Human Sciences
- Work and Family Studies
- Family and Consumer Sciences, Other

Library and Archival Studies
- Archives/Archival Administration
- Library and Information Science
- Library and Archival Sciences, Other

Public Administration
- Community Organization and Advocacy
- Public Administration

Religion and Theology
- Philosophy and Religious Studies, General
- Religion/Religious Studies
- Theology and Religious Vocations (excluding M.Div., M.H.L., B.D., and Ordination)
- Religion and Theology, Other

Social Work
- Social Work
- Youth Services/Administration
- Social Work, Other

Other Fields
- Fire Protection
- Homeland Security
- Interdisciplinary Studies
- Legal Research and Professional Studies (excluding L.L.B. and J.D.)
- Military Technologies
- Multidisciplinary Studies
- Other Fields Not Previously Classified

CGS INTERNATIONAL GRADUATE ADMISSIONS SURVEY

Cross-reference between CGS Taxonomy of Disciplines and the 2000 and the 2010 National Center for Education Statistics (NCES) Classification of Instructional Programs (CIP)

2010 Cross-Reference Table

CGS Taxonomy Broad Field	2010 CIP Codes
Arts and Humanities	16, 23, 24, 38.01, 50, 54
Business	52 (except 52.1304), 31.0504
Education	13, 31.05 (except 31.0504 and 31.0505), 31.06, 42.2805, 42.2806, 51.0913, 51.2309
Engineering	14, 15, 40.10
Life Sciences	01, 03, 26 (except 26.1302 and 26.1304), 30.19, 31.01, 31.03, 31.0505, 31.99, 41.01, 51 (except 51.0913, 51.2004, and 51.2309)
Physical and Earth Sciences (including Mathematics and Computer Science)	11, 26.1302, 26.1304, 27, 30.18, 40 (except 40.10), 41 (except 41.01), 51.2004, 52.1304
Social Sciences and Psychology	05, 19.0702, 30.11, 42 (except 42.2805 and 42.2806), 43.01, 44.05, 45
Other Fields	04, 09, 10, 12, 19 (except 19.0702), 25, 30 (except 30.11, 30.18, and 30.19), 38.00, 38.02, 38.99, 39, 43.02, 43.03, 43.99, 44 (except 44.05), 48, 49, and all other fields not classified above