



Findings from the 2012 CGS International Graduate Admissions Survey Phase II: Final Applications and Initial Offers of Admission

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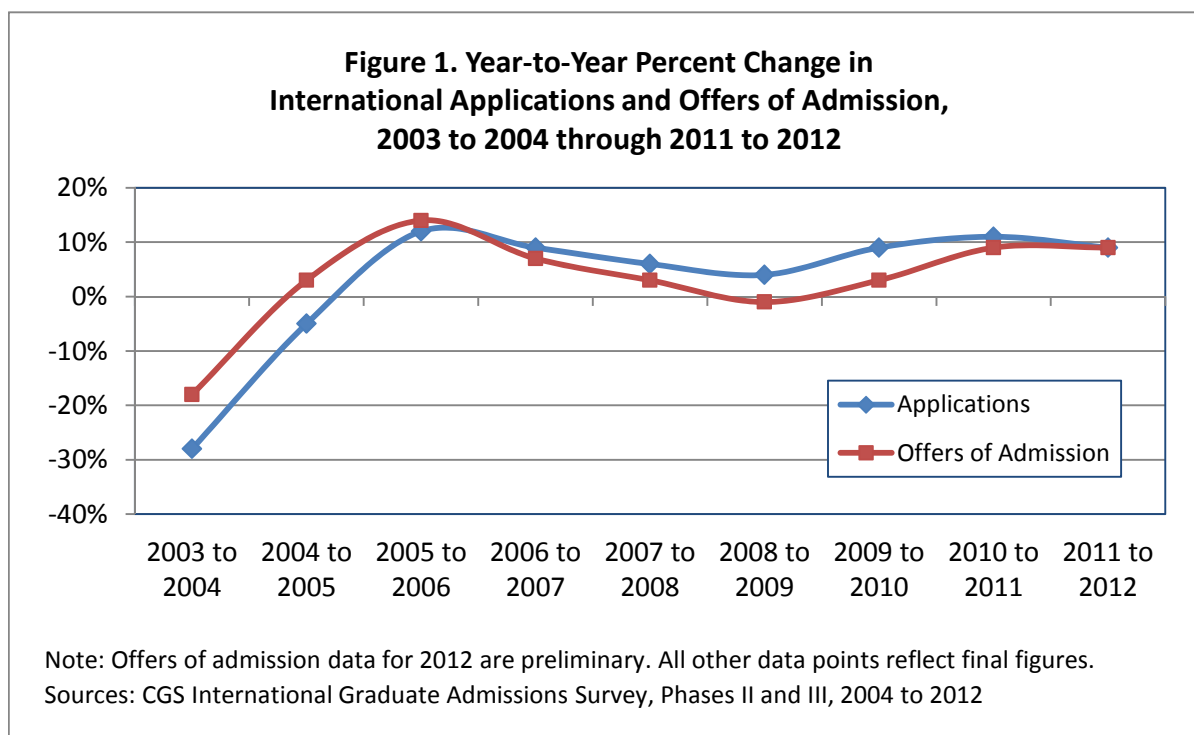


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Overview

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 9% in 2012, marking the seventh consecutive year of growth (see Figure 1). 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 4% in 2009, but these seven 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 2012, following a similar 9% gain in 2011 and a 3% increase in 2010. Since CGS began conducting this



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

survey in 2004, the year-to-year changes in international offers of admission have ranged from a low of an 18% decline in 2004 to a high of a 14% increase in 2006.

This report first describes the survey methodology used to collect and calculate changes in international applications and offers of admission from 2011 to 2012. 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 international joint and dual degree programs. Section five provides a summary and conclusions.

I. Survey Methodology and Response Rate

The survey population for the *2012 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* consisted of all 504 U.S. colleges and universities that were members of CGS as of June 2012.² A link to the survey instrument was e-mailed to the graduate dean (or equivalent) at each member institution on June 7, 2012, and responses were collected electronically through July 27, 2012.

The survey asked institutions to report their final numbers of completed applications received from prospective international students for fall 2011 and fall 2012. In addition, institutions were asked to provide the number of offers of admission granted to prospective international students for fall 2011 and fall 2012, as of June 5th 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 about international joint and dual degree programs, exchanges (study abroad), and research collaborations.

A total of 221 institutions responded to the survey, for a response rate of 44%. The response rates among certain types of institutions were even higher: seven of the ten institutions that award the largest numbers of master's and doctoral degrees to international students (70%), 20 of the 25 largest (80%), 42 of the 50 largest (84%), and 76 of the 100 largest (76%) 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 2009-10. Data were derived from the National Science Foundation's WebCASPAR database (<http://webcaspar.nsf.gov>) using data from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS).

the 100 largest institutions confer about 61% of all graduate degrees awarded annually to international students in the United States.⁴ Overall, the 221 institutions responding to the *Phase II* survey conferred about 61% of the approximately 97,000 graduate degrees awarded to international students in the United States in 2009-10, 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 598,935 applications to U.S. graduate schools by prospective international students for fall 2012 and on a total of 138,339 offers of admission to international students for fall 2012. In a few cases, institutions were unable to provide data for both 2011 and 2012 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 2012 *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

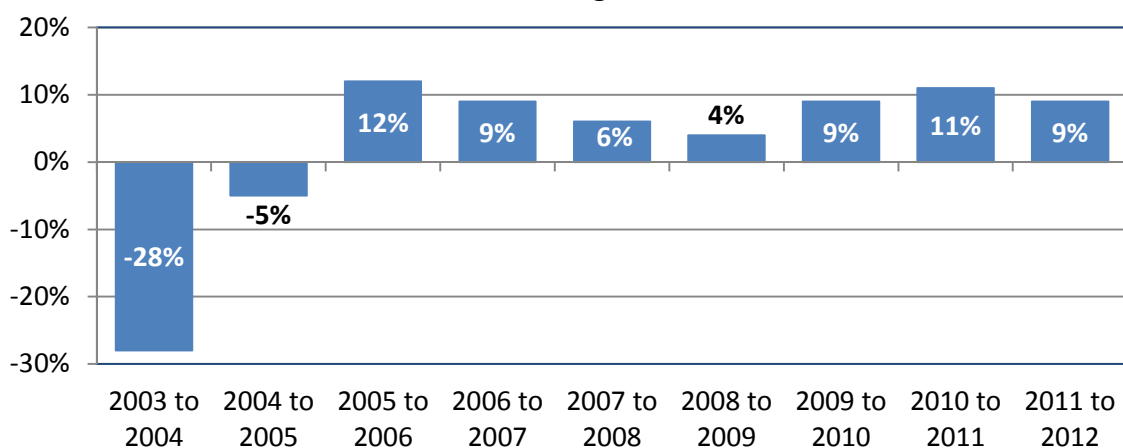
This year, applications to U.S. graduate schools from prospective international students increased for the seventh year in a row. Between 2011 and 2012, international graduate applications increased 9%, following an 11% gain in 2011 and a 9% increase in 2010 (see Figure 2 on the following page). The final 9% increase in applications from prospective international graduate students for fall 2012 matches the 9% increase in initial international applications reported by CGS in April 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 2012. Of the 214 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase II* survey, 141 (66%) reported an increase in international applications for fall 2012, with an average increase of 12% at these institutions. At the 72 institutions (34%) reporting a decrease, the average decline in

⁴ See footnote 3.

⁵ See footnote 3.

Figure 2. Year-to-Year Percent Change in Applications to U.S. Graduate Schools from Prospective International Students, 2003 to 2004 through 2011 to 2012



Sources: CGS International Graduate Admissions Survey, Phase II, 2004 to 2012

international applications was 8%. One institution reported no change in international applications between 2011 and 2012.

Applications by Field of Study

Overall, international students comprise about 14% 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 & humanities, education, and other fields.⁶ More than one-quarter (26%) of all international graduate students at U.S. institutions are enrolled in engineering, 20% are in physical & earth sciences (which includes mathematics and computer science), 17% are in business, and 13% are in life sciences. Just 8% of all international graduate students at U.S. institutions are enrolled in social sciences & psychology, 6% are in arts & humanities, 5% are in education, and 6% are in 'other' fields.

The *Phase II* survey results reveal that international applications increased in all broad fields of study in 2012, with the exception of life sciences, in which applications fell 1% between 2011 and 2012.⁷ The largest increase in international applications in 2012 occurred in education (18%), but as noted above, few international students are enrolled in this field. As shown in Table 1 on the following page, strong growth in applications also occurred in engineering (14%), social sciences & psychology (11%), 'other' fields (9%), and physical & earth sciences (8%). The strong growth in applications in engineering and physical & earth sciences is particularly

⁶ Bell, N. 2011. *Graduate Enrollment and Degrees: 2000 to 2010*. Washington, DC: Council of Graduate Schools.

⁷ See Appendix A for the survey taxonomy.

Table 1. Change in International Graduate Applications by Field of Study, 2008 to 2009 through 2011 to 2012

	Final Number of Applications, 2008 to 2009	Final Number of Applications, 2009 to 2010	Final Number of Applications, 2010 to 2011	Final Number of Applications, 2011 to 2012
International Total	4%	9%	11%	9%
Field of Study				
Arts & Humanities	5%	9%	8%	7%
Business	7%	11%	11%	7%
Education	8%	8%	13%	18%
Engineering	3%	8%	14%	14%
Life Sciences	0%	2%	8%	-1%
Physical & Earth Sciences	2%	10%	15%	8%
Social Sciences & Psychology	6%	11%	5%	11%
Other Fields	11%	13%	10%	9%

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, 2009 to 2012

noteworthy since these are the two largest broad fields for international students in U.S. graduate programs.

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 & Turkey. 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 & Turkey 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 (Africa, Europe, and the Middle East).⁸ China, India, South Korea, Taiwan, and Canada are the

⁸ *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

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.⁹ Mexico and Brazil are included in the survey since they are the largest sending countries from Central America and South America, respectively. Altogether, the ten countries and regions included in the *CGS International Graduate Admissions Survey* account for the home countries of about 85% 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 numbers of applications from China continued to increase dramatically in 2012 (see Table 2 on the following page). Graduate applications from prospective students from China increased 19% in 2012 following a 21% increase in 2011 and a 20% gain in 2010; this is the seventh consecutive year of double-digit growth for China. The growth in applications from China in 2012 also outpaced that of all other countries and regions included in the survey. Applications from prospective students from China account for a large percentage of all applications to U.S. graduate schools by prospective international students. In 2012, 45% of all international applications to U.S. graduate programs came from students from China.

Graduate applications from prospective students from India increased 3% in 2012 after increasing 8% 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.

Applications from South Korea fell 1% in 2012 following a 2% gain last year. Among the other countries and regions included in the survey, growth was strongest between 2011 and 2012 in applications from the Middle East (11%), Mexico (10%), and Brazil (9%). Canada (7%) and Europe (also 7%) experienced gains, but slight declines occurred in applications from prospective graduate students from Africa (-3%) and Taiwan (-2%).

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.

⁹ Bell, N. 2011. *Findings from the 2011 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment*. Washington, DC: Council of Graduate Schools; Chow, P. and Bhandari, R. 2011. *Open Doors 2011: Report on International Educational Exchange*. New York, NY: Institute of International Education.

Table 2. Change in International Graduate Applications by Country/Region of Origin, 2008 to 2009 through 2011 to 2012

	Final Number of Applications, 2008 to 2009	Final Number of Applications, 2009 to 2010	Final Number of Applications, 2010 to 2011	Final Number of Applications, 2011 to 2012
International Total	4%	9%	11%	9%
Country of Origin				
China	14%	20%	21%	19%
India	-12%	1%	8%	3%
South Korea	-9%	0%	2%	-1%
Taiwan	--	--	--	-2%
Canada	--	--	--	7%
Mexico	--	--	--	10%
Brazil	--	--	--	9%
Region of Origin				
Africa	--	--	--	-3%
Europe	--	--	--	7%
Middle East *	22%	20%	16%	11%

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, 2009 to 2012

Applications by Institutional Control and Carnegie Classification

International applications increased in both public institutions and private, not-for-profit institutions in 2012. Among the survey respondents, international applications increased 8% on average in public institutions and 12% on average in private, not-for-profit institutions in 2012 (see Table 3 on the following page).¹⁰ For the last three years, the gains at private, not-for-profit institutions have outpaced those at public institutions.

By Carnegie classification, applications from prospective international graduate students increased 10% on average at doctoral institutions in 2012, slightly less than the 11% increase that occurred in 2011.¹¹ International applications decreased 5% at master's-focused

¹⁰ Of the 214 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase II* survey, 164 were public institutions, 49 were private, not-for profit institutions, and one was a private, for-profit institution.

¹¹ 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

Table 3. Change in International Graduate Applications by Institutional Control and Carnegie Classification, 2009 to 2010 through 2011 to 2012

	Final % Change in Applications 2009 to 2010	Final % Change in Applications 2010 to 2011	Final % Change in Applications 2011 to 2012
Total (All Institutions)	9%	11%	9%
Public	7%	10%	8%
Private, not-for-profit	12%	16%	12%
Doctoral Institutions	9%	11%	10%
Public	7%	9%	9%
Private, not-for-profit	13%	16%	13%
Master's-Focused Institutions	3%	15%	-5%
Public	3%	16%	-5%
Private, not-for-profit	3%	12%	-5%

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, 2010 to 2012

institutions in 2012, but this decrease is based on a relatively small number of international applications. In the 2012 *Phase II* survey, just 3% of all applications from prospective international students were for admission to master's-focused institutions.

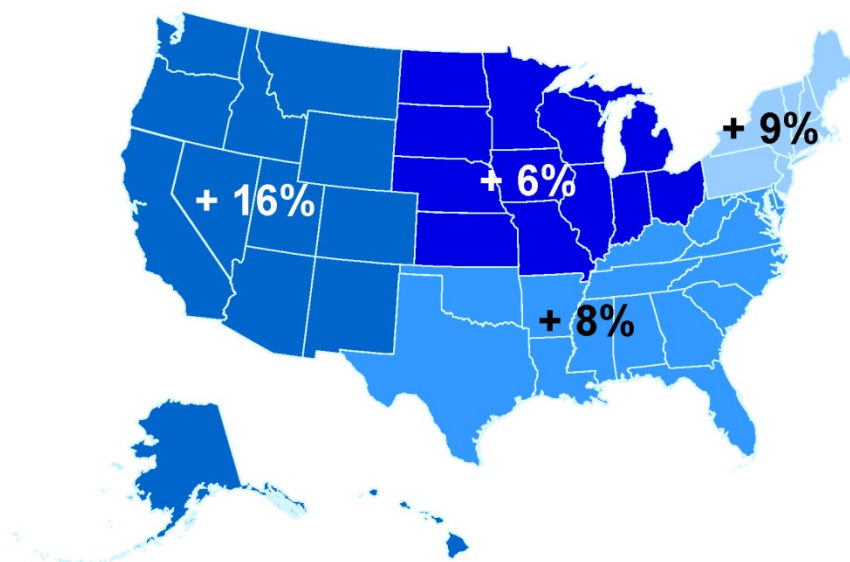
Applications by Geographic Region

Applications to U.S. graduate schools from prospective international students increased in all four major regions of the United States in 2012. International applications increased most on average in the West (up 16%) and Northeast (9%) in 2012. Increases in international applications were slightly smaller on average at institutions located in the South (8%) and Midwest (6%), as shown in Figure 3 on the following page.¹²

as master's institutions. Responding institutions classified as specialized or baccalaureate institutions were excluded from this particular analysis. Of the 214 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase II* survey, 152 were doctoral institutions, 50 were master's-focused institutions, and 12 were classified as specialized or baccalaureate institutions.

¹² Of the 214 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase II* survey, 36 institutions are located in the West, 54 in the Midwest, 40 in the Northeast, and 84 in the South. 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

Figure 3. Year-to-Year Percent Change in International Applications by Geographic Region, 2011 to 2012



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 on the following page displays the changes in international graduate applications from 2011 to 2012 for the responding colleges and universities that are among the 10, 25, 50, and 100 largest in terms of the numbers 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 collected by the U.S. Department of Education.¹³

Increases in international applications in 2012 were stronger on average at institutions awarding larger numbers of graduate degrees to international students than at institutions awarding smaller numbers of graduate degrees to international students. International graduate applications increased 10% on average at the responding institutions that are among the 100 largest compared with 6% on average at the institutions outside the largest 100 (see Table 4). This pattern of stronger increases at institutions awarding large numbers of graduate degrees to international students was true on average for applications from prospective students from China, India, Canada, Mexico, and Europe. In contrast, the increases in

Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

¹³ See footnote 3 for more information.

Table 4. Change in International Graduate Applications by Country/Region of Origin and Number of Graduate Degrees Awarded to International Students, 2011 to 2012

	All Institutions	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	9%	11%	10%	10%	10%	6%
Country of Origin						
China	19%	21%	19%	20%	20%	13%
India	3%	1%	2%	4%	4%	-5%
South Korea	-1%	-2%	0%	-2%	-1%	-1%
Taiwan	-2%	2%	0%	-1%	-1%	-7%
Canada	7%	4%	8%	8%	8%	2%
Mexico	10%	22%	14%	11%	14%	-8%
Brazil	9%	0%	16%	12%	7%	23%
Region of Origin						
Africa	-3%	-11%	-5%	-7%	-5%	-1%
Europe	7%	4%	9%	8%	7%	3%
Middle East	11%	8%	2%	3%	7%	18%

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, 2012

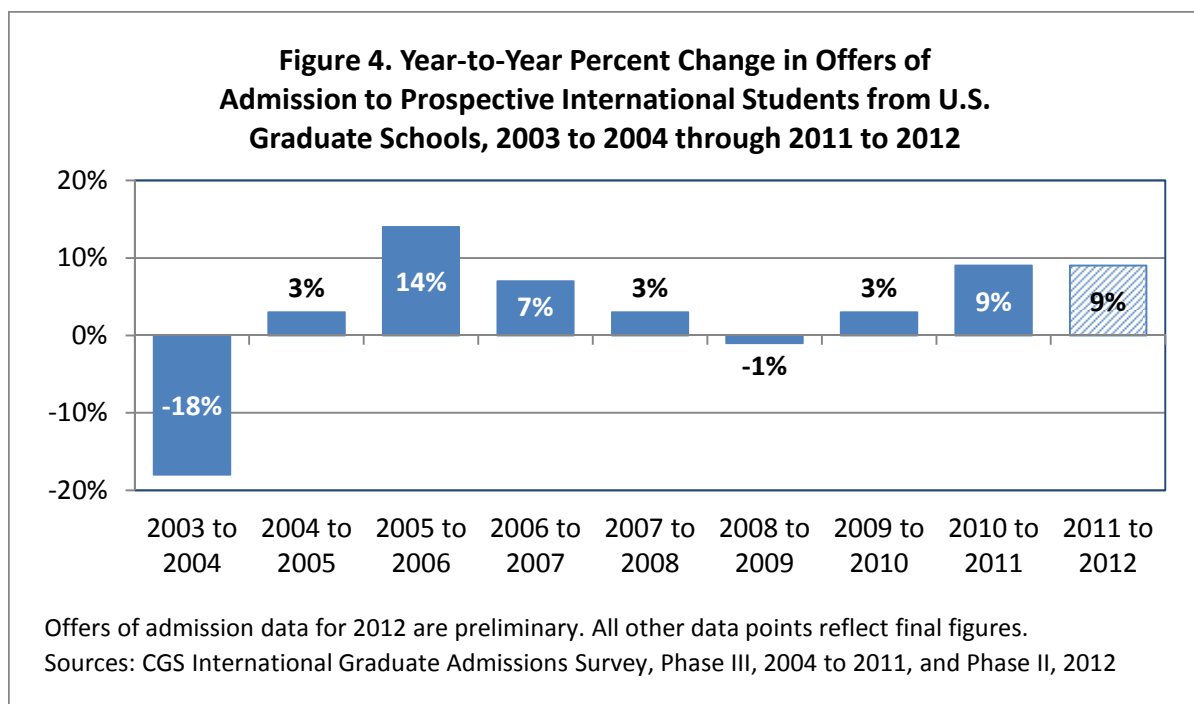
applications from prospective graduate students from Brazil and the Middle East were larger on average at the institutions outside the largest 100. For South Korea, Taiwan, and Africa, decreases in international applications occurred at both the 100 largest institutions and the institutions outside the largest 100.

III. Offers of Admission to Prospective International Graduate Students

Total Number of Offers of Admission

For prospective international students, offers of admission to U.S. graduate programs increased 9% between 2011 and 2012. This year's increase in initial offers of admission follows a similar 9% gain in 2011 and a 3% increase in 2010, and it marks the third consecutive year of gains in international offers of admission (see Figure 4 on the following page).

The majority of this year's *Phase II* survey respondents reported an increase in offers of admission to prospective international students in 2012. Of the 214 institutions that provided total offers of admission data for both 2011 and 2012 in this year's *Phase II* survey, 128 (60%) reported an increase in international offers of admission for fall 2012, with an average increase of 17% at these institutions. At the 82 institutions (38%) reporting a decrease, the average



decline in international offers of admission was 14%. Four institutions (2%) reported no change in international offers of admission between 2011 and 2012.

Offers of Admission by Field of Study

Increases occurred in international offers of admission in all broad fields of study in 2012, with the exception of life sciences, in which offers of admission remained flat between 2011 and 2012.¹⁴ The largest increases in international offers of admission in 2012 occurred in business and education, with 17% gains in both of these broad fields, as shown in Table 5 on the following page. This year's initial 17% increase in business follows an 11% gain in 2011, while this year's initial 17% increase in education follows a 7% gain last year.

Strong growth in international offers of admission also occurred in 2012 in social sciences & psychology (14%), 'other' fields (9%), and engineering (7%), with slightly smaller increases in arts & humanities (6%), and physical & earth sciences (5%). This year's lack of growth in international offers of admission in life sciences follows a 7% gain in 2011 and a 5% decline in 2010.

¹⁴ See Appendix A for the survey taxonomy.

Table 5. Change in International Offers of Admission by Field of Study, 2008 to 2009 through 2011 to 2012

	Final Number of Offers of Admission, 2008 to 2009	Final Number of Offers of Admission, 2009 to 2010	Final Number of Offers of Admission, 2010 to 2011	Initial Number of Offers of Admission, 2011 to 2012
International Total	-1%	3%	9%	9%
Field of Study				
Arts & Humanities	1%	2%	5%	6%
Business	4%	3%	11%	17%
Education	10%	-5%	7%	17%
Engineering	-3%	2%	8%	7%
Life Sciences	3%	-5%	7%	0%
Physical & Earth Sciences	-5%	8%	11%	5%
Social Sciences & Psychology	-1%	4%	2%	14%
Other Fields	11%	5%	13%	9%

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, 2009 to 2011, and Phase II, 2012

Offers of Admission by Country/Region of Origin¹⁵

Offers of admission to prospective graduate students from China continued to increase in 2012, with a 20% gain (see Table 6 on the following page). This year's gain follows a 21% increase in 2011 and a 15% gain in 2010; this is the seventh consecutive year of double-digit growth for China. The growth in offers of admission to students from China in 2012 also outpaced that of all other countries and regions included in the survey.

Offers of admission to prospective students from India remained flat in 2012 after increasing 2% last year. Last year's gain in offers of admission was the only increase to occur for students from India since 2007. Offers of admission to prospective students from South Korea also remained flat in 2012 following five consecutive years of declines.

Among the other countries and regions included in the survey, growth was strongest between 2011 and 2012 in offers of admission to prospective graduate students from the Middle East (17%), Brazil (13%), and Canada (10%). Europe (3%) and Africa (1%) experienced gains, but declines occurred in offers of admission to prospective graduate students from Mexico (-6%) and Taiwan (-2%).

¹⁵ See footnote 8 for a list of the countries included in each region.

Table 6. Change in International Offers of Admission by Country/Region of Origin, 2008 to 2009 through 2011 to 2012

	Final Number of Offers of Admission, 2008 to 2009	Final Number of Offers of Admission, 2009 to 2010	Final Number of Offers of Admission, 2010 to 2011	Initial Number of Offers of Admission, 2011 to 2012
International Total	-1%	3%	9%	9%
Country of Origin				
China	17%	15%	21%	20%
India	-14%	-5%	2%	0%
South Korea	-14%	-7%	-2%	0%
Taiwan	--	--	--	-2%
Canada	--	--	--	10%
Mexico	--	--	--	-6%
Brazil	--	--	--	13%
Region of Origin				
Africa	--	--	--	1%
Europe	--	--	--	3%
Middle East *	14%	10%	16%	17%

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, 2009 to 2011, and Phase II, 2012

Offers of Admission by Institutional Control and Carnegie Classification

International offers of admission increased in both public institutions and private, not-for-profit institutions in 2012. Among the survey respondents, international offers of admission increased 8% on average in public institutions and 10% on average in private, not-for-profit institutions in 2012 (see Table 7 on the following page).¹⁶ This year's gains follow nearly identical increases last year.

By Carnegie classification, offers of admission to prospective international graduate students increased 11% on average at doctoral institutions in 2012, a slightly larger gain than the 9% increase that occurred in 2011.¹⁷ International offers of admission decreased 19% at master's-

¹⁶ Of the 214 institutions that provided total offers of admission data for both 2011 and 2012 in this year's *Phase II* survey, 164 were public institutions, 49 were private, not-for profit institutions, and one was a private, for-profit institution.

¹⁷ Of the 214 institutions that provided total offers of admission data for both 2011 and 2012 in this year's *Phase II* survey, 152 were doctoral institutions, 50 were master's-focused institutions, and 12 were classified as specialized or baccalaureate institutions.

Table 7. Change in International Offers of Admission by Institutional Control and Carnegie Classification, 2009 to 2010 through 2011 to 2012

	Final Change in Offers of Admission, 2009 to 2010	Final Change in Offers of Admission, 2010 to 2011	Initial Change in Offers of Admission, 2011 to 2012
Total (All Institutions)	3%	9%	9%
Public	1%	8%	8%
Private, not-for-profit	8%	11%	10%
Doctoral Institutions	4%	9%	11%
Public	2%	8%	10%
Private, not-for-profit	7%	13%	13%
Master's-Focused Institutions	1%	0%	-19%
Public	-3%	11%	-20%
Private, not-for-profit	7%	-15%	-17%

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, 2010 and 2011, and Phase II, 2012

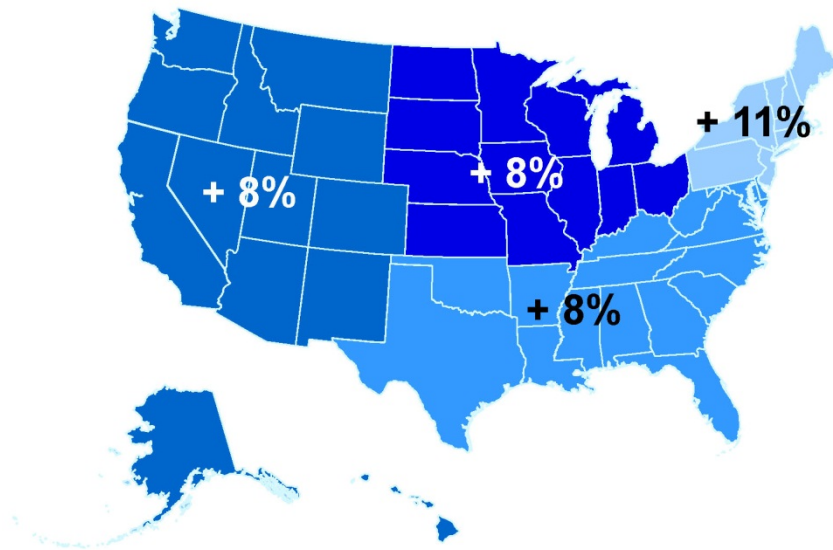
focused institutions in 2012, following no growth in 2011. This year's decrease should be interpreted cautiously, however, since it is based on a relatively small number of international offers of admission. In the 2012 *Phase II* survey, just 5% of all offers of admission prospective international graduate students were for admission to master's-focused institutions.

Offers of Admission by Geographic Region

Offers of admission to prospective international graduate students increased in all four major regions of the United States in 2012. International offers of admission increased most on average in the Northeast (up 11%) in 2012. Increases in international offers of admission were slightly smaller on average at institutions located in the Midwest, West, and South, with 8% gains occurring in each of these geographic regions in 2012, as shown in Figure 5 on the following page.¹⁸

¹⁸ Of the 214 institutions that provided total offers of admission data for both 2011 and 2012 in this year's *Phase II* survey, 36 institutions are located in the West, 54 in the Midwest, 40 in the Northeast, and 84 in the South. See footnote 12 for a list of the state included in each region.

Figure 5. Year-to-Year Percent Change in International Offers of Admission by Geographic Region, 2011 to 2012



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

Increases in international offers of admission in 2012 were stronger on average at institutions awarding larger numbers of graduate degrees to international students than at institutions awarding smaller numbers of graduate degrees to international students.¹⁹ International offers of admission increased 10% on average at the responding institutions that are among the 100 largest compared with 6% on average at the institutions outside the largest 100 (see Table 8).

This pattern of stronger increases at institutions awarding larger numbers of graduate degrees to international students was true on average for offers of admission to prospective graduate students from China, India, Canada, Mexico, Africa, and Europe. In contrast, increases in offers of admission to prospective graduate students from South Korea, Brazil, and the Middle East were larger on average at the institutions outside the largest 100. For Taiwan, decreases in international offers of admission occurred at both the 100 largest institutions and the institutions outside the largest 100, but the drop was steeper at the institutions outside the largest 100.

¹⁹ 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, 2011 to 2012

	All Institutions	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	9%	16%	11%	8%	10%	6%
Country of Origin						
China	20%	23%	18%	19%	21%	18%
India	0%	10%	1%	-3%	1%	-4%
South Korea	0%	6%	3%	-3%	0%	1%
Taiwan	-2%	8%	5%	-1%	-1%	-8%
Canada	10%	6%	13%	10%	11%	7%
Mexico	-6%	11%	8%	-3%	2%	-24%
Brazil	13%	13%	31%	16%	11%	21%
Region of Origin						
Africa	1%	2%	6%	-1%	2%	-2%
Europe	3%	5%	11%	6%	5%	-2%
Middle East	17%	13%	1%	10%	16%	19%

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, 2012

IV. International Joint and Dual Degree Programs

As part of CGS' on-going effort to measure the scope of internationalization in U.S. graduate programs, the *Phase II* survey included a question about the number of international joint and dual degree programs at the responding institutions, broken out by broad field and degree level. Collaborative programs are just one example of the developing partnerships that have occurred at many universities from around the globe for many years. These joint and dual degree programs provide students with global experiences that enhance their research, offer the opportunity to develop inter-cultural skills, and position the participating students to be competitive in the global labor market.

Collaborative programs go by a variety of names, and they are often defined in different ways by different institutions. In order to ensure that institutions were reporting data to CGS in a consistent fashion, institutions were asked to use the following definition when reporting their data to CGS in this year's *Phase II* survey:

- International joint degree program: Students study at two or more institutions and upon completion of the program receive a single diploma representing work completed at two or more institutions.

- International dual (or double) degree program: Students study at two or more institutions and upon completion of the program receive a separate diploma from each of the participating institutions.

The growth in the number of international collaborative degree programs has been previously documented by CGS through three separate data collection efforts. In both the 2007 and 2008 *Phase II* surveys, CGS asked institutions to indicate which types of collaborative graduate degree, certificate, or other programs they had established with international higher education institutions.²⁰ The data from these two surveys suggested that the number of joint and dual degree programs was increasing, with the growth most pronounced at institutions with high numbers of international students. Among the survey respondents in 2007, 14% of the respondents indicated that they had established a dual degree program with an international institution, and 10% reported having at least one joint degree program. In the 2008 survey, the number of respondents reporting a dual degree program increased to 21%, while the number reporting a joint degree program remained at 10%.

In order to further explore the prevalence of international collaborative programs and study best practices for administering these types of programs, CGS launched the Graduate International Collaborations Project in 2009 with funding from the National Science Foundation. As part of this project, CGS surveyed 47 institutions that had reported in the 2007 and 2008 *Phase II* surveys that they had existing collaborative programs and 37 that reported planning to develop programs within the next two years. A total of 43 institutions responded to this survey, providing data on a total of 32 joint master's degrees, 109 dual master's degrees, 7 joint doctoral degrees, and 20 dual doctoral degrees. Out of these 168 programs, 68 were in business, 52 were in engineering, 43 were other research degrees, and 5 were other non-research degrees.²¹

With this year's *Phase II* survey, CGS sought to gather updated information about the number of joint and dual degree programs among CGS' member institutions. A total of 174 respondents provided data on the number of international joint and dual degree programs at their institution. Out of these 174 institutions, a total of 77 (44%) indicated that they had one or more international joint or dual degree programs at their institution. While the results from the *Phase II* survey in 2008 and this year's *Phase II* survey are not directly comparable due to differing respondents and slight changes in the definitions of joint and dual degrees, the share of respondents indicating the existence of joint and dual degree programs is higher today (44%) than it was in 2008 (31%), suggesting that the number institutions establishing such programs is still increasing.

Survey respondents were asked to provide data on the number of joint and dual degree programs offered at their institution, broken out by degree level (master's vs. doctoral) and

²⁰ See <http://www.cgsnet.org/benchmarking/international-graduate-admissions-survey> for these reports.

²¹ Council of Graduate Schools. 2010. *Joint Degrees, Dual Degrees, and International Research Collaborations: A Report on the CGS Graduate International Collaborations Project*. Washington, DC: Council of Graduate Schools.

field of study. CGS' previous research indicated that dual degree programs were more common than joint degree programs, and that joint and dual degree programs were more prevalent at the master's level than the doctoral level. The results of this year's *Phase II* survey confirm those findings. Overall, the 77 institutions that indicated the existence of one or more joint or dual degree programs reported on a total of 345 joint or dual degree programs (see Table 9). Of these programs, nearly eight out of ten (79%) were dual degree programs, and nearly nine out of ten (87%) were at the master's level. While the number of programs reported in this year's *Phase II* survey far exceeds the number reported in the Graduate International Collaborations Project, the percentages of programs that were dual degree programs or master's-level programs in this year's *Phase II* survey were very similar to the percentages seen in the Graduate International Collaborations Project. In that project's survey, 77% of the programs were dual degree programs, and 84% were at the master's level.

CGS's previous research also indicated that joint and dual degree programs were more common in business and engineering than in other fields. The data from this year's *Phase II* survey indicate that this trend has continued. Among the joint and dual degree programs reported in the survey, one-third (34%) were in business, 29% were in engineering, 21% were other research degrees, and 17% were other non-research (professional) degrees.

Table 9. International Joint and Dual Degree Programs by Field and Level

	Business	Engineering	Other Research Degree	Other non- Research Degree	Total Number of Programs
Joint Master's Degrees	19	21	10	9	59
Dual Master's Degree	95	61	43	43	242
Joint Doctoral Degrees	0	6	6	2	14
Dual Doctoral Degrees	3	11	13	3	30
Total	117	99	72	57	345

Source: CGS International Graduate Admissions Survey, Phase II, 2012

As noted earlier, previous CGS research indicated that the growth in the number of joint and dual degree programs was most pronounced at institutions with high numbers of international students. This year's *Phase II* survey found, however, that institutions with larger numbers of international students and institutions with smaller numbers of international students were nearly equally likely to indicate that they had one or more international joint or dual degree programs at their institution. Among the 77 survey respondents with international joint or dual degree programs, 37 (48%) were among the 100 largest in terms of the number of graduate degrees awarded to international students, and 40 (52%) were among the institutions outside the largest 100.

Overall, the results from the *Phase II* survey suggest an increasing scope of internationalization in U.S. graduate programs in terms of the numbers of international joint and dual degrees. While direct comparisons between CGS' four research efforts in this area are constrained by differing survey populations and responding institutions, the results suggest that not only are the numbers of international joint and dual degrees increasing, but that dual degree programs are more common than joint programs, that international joint and dual degree programs are more commonly found at the master's level and in business or engineering, and that increasingly these types of programs are being developed at institutions with smaller numbers of international students.

V. Summary and Conclusions

Summary

International Applications

The results of the *2012 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 9% between 2011 and 2012, the seventh consecutive year of gains. This year's increase follows an 11% gain in 2011 and a 9% increase in 2010. International applications increased in all broad fields of study in 2012, with the exception of life sciences, in which applications remained fell 1%. The largest gains occurred in education (18%), engineering (14%), social sciences & psychology (11%), 'other' fields (9%), and physical & earth sciences (8%).

Applications from prospective graduate students from China increased 19% in 2012, marking the seventh consecutive year of double-digit growth. Strong growth also occurred in applications from prospective graduate students from the Middle East (11%), Mexico (10%), Brazil (9%), Europe (7%), and Canada (also 7%). Applications from prospective graduate students from three regions/countries fell in 2012: Africa (-3%), Taiwan (-2%), and South Korea (-1%). Applications from prospective Indian graduate students increased 3% in 2012, following an 8% gain last year.

Public and private, not-for-profit institutions both experienced strong gains in applications from international students for fall 2012 (up 8% on average in public institutions and up 12% on average in private, not-for-profit institutions). By Carnegie classification, graduate applications from prospective international students increased 10% at doctoral institutions, but fell 5% at master's-focused institutions.

Increases in international applications in 2012 were stronger on average at institutions awarding larger numbers of graduate degrees to international students. International graduate applications increased 10% on average at the responding institutions that are among the 100 largest in terms of the number of graduate degrees awarded to international students, compared with 6% on average at the institutions outside the largest 100.

International Offers of Admission

For prospective international students, offers of admission to U.S. graduate programs increased 9% between 2011 and 2012. This year's increase in initial offers of admission follows a similar 9% gain in 2011 and a 3% increase in 2010, and it marks the third consecutive year of gains in international offers of admission.

Increases occurred in international offers of admission in all broad fields of study in 2012, with the exception of life sciences, in which offers of admission remained flat between 2011 and 2012. The largest increases in international offers of admission in 2012 occurred in business and education, with 17% gains in both of these broad fields.

Offers of admission to prospective graduate students from China continued to increase in 2012, with a 20% gain; this is the seventh consecutive year of double-digit growth for China. Offers of admission to prospective graduate students from India and South Korea remained flat in 2012. Among the other countries and regions included in the survey, growth was strongest between 2011 and 2012 in offers of admission to prospective graduate students from the Middle East (17%), Brazil (13%), and Canada (10%).

Public and private, not-for-profit institutions both experienced strong gains in offers of admission to international students for fall 2012 (up 8% on average in public institutions and up 10% on average in private, not-for-profit institutions). By Carnegie classification, offers of admission to prospective international graduate students increased 11% at doctoral institutions, but fell 19% at master's-focused institutions.

Similar to the findings for international applications, increases in international offers of admission in 2012 were stronger on average at institutions awarding larger numbers of graduate degrees to international students. International graduate offers of admission increased 10% on average at the responding institutions that are among the 100 largest, compared with 6% on average at the institutions outside the largest 100.

International Joint and Dual Degree Programs

A total of 174 respondents provided data on the number of international joint and dual degree programs at their institution. Out of these 174 institutions, 77 (44%) indicated that they had one or more international joint or dual degree programs at their institution. Overall, these 77 institutions reported on a total of 345 joint or dual degree programs at their institutions. Of these programs, nearly eight out of ten (79%) were dual degree programs, and nearly nine out of ten (87%) were at the master's level. Among the joint and dual degree programs reported in the survey, one-third (34%) were in business, 29% were in engineering, 21% were other research degrees, and 17% were other non-research (professional) degrees.

Institutions with larger numbers of international students and institutions with smaller numbers of international students were nearly equally likely to indicate that they had one

or more international joint or dual degree programs at their institution. Among the 77 survey respondents with international joint or dual degree programs, 48% were among the 100 largest in terms of the number of graduate degrees awarded to international students, and 52% were among the institutions outside the largest 100.

While direct comparisons between these findings and CGS' three previous research efforts in this area are constrained by differing survey populations and responding institutions, the results suggest increasing numbers of international joint and dual degrees and the continued concentration of these programs at the master's level and in business or engineering.

Conclusions

The data from the *2012 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* indicate that several recent trends in the participation of international students in U.S. graduate education are continuing in 2012. The year-to-year growth in international applications and offers of admission remains strong and continues to be driven by China. Growth also remains stronger at institutions awarding larger numbers of graduate degrees to international students than at institutions awarding smaller numbers of degrees. Additionally, the *Phase II* survey results continue to show that international students are much more likely to apply to doctoral institutions than master's-focused institutions, and that the growth in international applications and offers of admission is stronger at private, not-for-profit institutions than public institutions.

The survey results also indicate that the numbers of international students from India and South Korea are unlikely to increase in 2012. While these two countries remain the second and third largest sending countries of international students to U.S. graduate programs, the numbers of students from these two countries participating in U.S. graduate programs remain stagnant after considerable declines in recent years. While there have been some gains in terms of applications from Indian students, the lack of increase in initial offers of admission suggests that there will be little to no growth in first-time enrollment of Indian students this fall.

The *Phase II* survey results also suggest that there may be an increase in international first-time enrollment in business in fall 2012. The survey found a 7% increase in applications and a 17% increase in offers of admission, indicating strong interest among international students in U.S. business programs. Interest in education programs also appears strong. While only 5% of all international students in U.S. graduate programs are pursuing degrees in education, the figures from this survey suggest that that percentage may be increasing, given the 18% increase in international applications this year and the corresponding 17% increase in international offers of admission in education.

Overall the *Phase II* survey results suggest that international first-time enrollment will exhibit strong growth in fall 2012. However, the future beyond 2012 remains uncertain. The global economy, competition from other countries for the best and brightest international students,

the continued growth in the capacity for graduate education in other countries, the increasing cost of graduate education in the United States, and any changes in federal funding for research could all affect the number of international students coming to U.S. graduate programs in 2013 and beyond. 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.

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Appendix A
Survey Questionnaire and Taxonomy of Fields of Study



2012 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission

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 2011 and Fall 2012. In addition, please provide the number of offers of admission granted to prospective international graduate students for Fall 2011 and Fall 2012 *as of June 5th or the same date each year*. See pages 4-10 for instructions, definitions and taxonomy.

I. Total Non-U.S. Citizens		2011	2012
Total Non-U.S. Citizens (see definition on page 4)	Applications		
	Offers of Admission		

II. Non-U.S. Citizens from Select Countries/Regions of Origin		2011	2012
Countries (see definitions on page 5)			
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		

(Continued on the following page.)

Regions (see definitions on page 5)			
Africa	Applications		
	Offers of Admission		
Europe	Applications		
	Offers of Admission		
Middle East	Applications		
	Offers of Admission		

III. Total Non-U.S. Citizens by Field of Study (see definitions on page 5)		2011	2012
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 and Earth Sciences (including Math & Computer Sci.)	Applications		
	Offers of Admission		
Social Sciences & Psychology	Applications		
	Offers of Admission		
Other Fields	Applications		
	Offers of Admission		

B. As part of CGS' on-going effort to measure the scope of internationalization in U.S. graduate programs, please provide data on international joint and dual degree programs, exchanges (study abroad), and research collaborations. For the following questions, please use the standardized definitions provided below (even if your institution uses different definitions):

International joint degree program: Students study at two or more institutions and upon completion of the program receive a single diploma representing work completed at two or more institutions.

International dual (or double) degree program: Students study at two or more institutions and upon completion of the program receive a separate diploma from each of the participating institutions.

International exchange (study abroad) program: Students study abroad for academic credit, with the length of study abroad typically ranging from a few weeks to one year.

International research collaborations (with foreign travel): Students engage in collaborative research with individuals located outside the United States, with at least some travel to the foreign country required.

International research collaborations (without foreign travel): Students engage in collaborative research with individuals located outside the United States, with no travel to the foreign country required.

(Continued on the following page.)

1. How many joint and dual master's and doctoral degree programs of each type does your institution currently have with an international partner institution?

Degree Level and Degree Type		Broad Field of Study			
		Business	Engineering	Other Research Degree	Other non-Research (i.e., Professional) Degree
Master's	International Joint Degrees				
	International Dual Degrees				
Doctoral	International Joint Degrees				
	International Dual Degrees				

2. Does your institution (or your graduate school) maintain a centralized database in which you track the number of graduate students at your institution who are participating in the following types of international experiences?

	Yes	No	Comments?
International Joint Degrees	<input type="radio"/>	<input checked="" type="radio"/>	
International Dual Degrees	<input type="radio"/>	<input checked="" type="radio"/>	
International Exchange (Study Abroad) Programs	<input type="radio"/>	<input checked="" type="radio"/>	
International Research Collaborations (<u>with</u> foreign travel)	<input type="radio"/>	<input checked="" type="radio"/>	
International Research Collaborations (<u>without</u> foreign travel)	<input type="radio"/>	<input checked="" type="radio"/>	

3. What data are lacking at your institution to measure the scope and quality of internationalization in your graduate programs?

4. Please indicate the major factors that you feel may positively or negatively impact prospective U.S. and international applications to your institution's graduate programs for *Fall 2013*.

Please submit your survey by Friday, July 13, 2012. Click the "Submit by E-mail" button below to send your completed survey to CGS.

Submit by Email

Questions?

If you have problems submitting your survey electronically, please contact Josh Mahler at (202) 461-3862 or jmahler@cgs.nche.edu. For all other questions, please contact Nathan Bell, CGS Director of Research and Policy Analysis, at (202) 461-3886 or nbell@cgs.nche.edu.

SURVEY INSTRUCTIONS AND DEFINITIONS

About the Survey:

The 2012 CGS *International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* is being sent to all U.S. colleges and universities that are members of the Council of Graduate Schools (CGS) as of May 2012. The survey asks institutions to report the final numbers of completed applications 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 the CGS since 2004. Survey reports are available online at www.cgsnet.org.

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 applications should be counted and included in your survey data. Include data for all individuals who have fulfilled your institution's requirements to be considered for admission, 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 2011 and fall 2012 as of the same date each year. For example, if you provide data for fall 2011 offers of admission as of 6/5/11, provide fall 2012 offers of admission data as of 6/5/12. 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 5th, 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 providing data for Section I, "Total Non-U.S. Citizens," include non-U.S. citizens on temporary visas from **all** countries and regions of 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 7-10. 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.

- As a courtesy, we have provided data for 2011 to institutions that responded to the *Phase II* survey last year. This information is intended to reduce your response burden and to serve as a guide for completing the survey. Please do not key your 2012 data into the table included in the e-mail. Rather, key your 2011 data into the electronic form for 2012, updating any numbers revised since submission last year, and adding your new data for 2012.
- **Submission instructions:** After filling in all fields, please click the "Submit by E-mail" button on page two. A new window will appear in your e-mail application (e.g., Outlook) addressed to CGS staff member Josh Mahler, with the completed survey form attached as a .pdf document. Hit the "send" button in your e-mail application to submit your survey. We prefer to receive the survey data electronically, but if you are unable to submit by e-mail, please print the completed form and fax it to 202-331-7157.
- **Confirmation of receipt:** Within two business days of electronic submission you will receive e-mail verification from CGS that your survey was successfully submitted. If you do not receive this e-mail confirmation, please contact Josh Mahler at jmahler@cgs.nche.edu or (202) 461-3862.
- **The survey response deadline is Friday, July 13, 2012.**
- **Contact information:** If you have problems submitting your survey electronically, please contact Josh Mahler at jmahler@cgs.nche.edu or (202) 461-3862. For all other questions, please contact Nathan Bell, CGS Director of Research and Policy Analysis, at nbell@cgs.nche.edu or (202) 461-3886.

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