

Findings from the 2012 CGS International Graduate Admissions Survey Phase I: Applications

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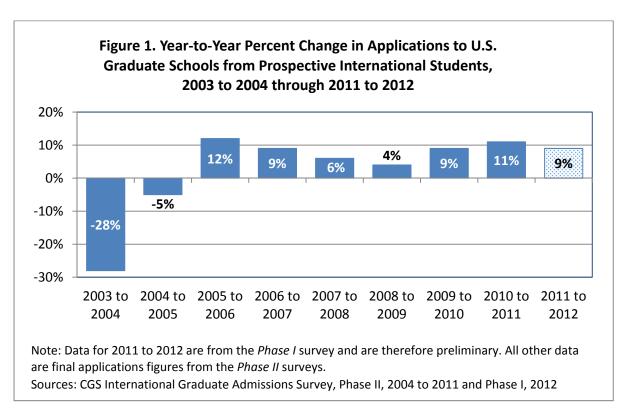
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Overview

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 I* survey indicate 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.



¹ See http://www.cgsnet.org/Default.aspx?tabid=172 for reports from the *CGS International Graduate Admissions Survey* from 2007 to present.

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This report first describes the survey methodology used to collect and calculate changes in international applications 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. Section three provides a summary and conclusions.

I. Survey Methodology and Response Rate

The survey population for the 2012 CGS International Graduate Admissions Survey, Phase I: Applications consisted of all 500 U.S. colleges and universities that were members of CGS as of January 2012.² A link to the survey instrument was e-mailed to the graduate dean (or equivalent) at each member institution on January 24, 2012, and responses were collected electronically through March 9, 2012.

The survey asked institutions to report their numbers of applications for admission to graduate programs from prospective international students for fall 2011 and fall 2012, as of 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 data on applications from students who originate from ten key sending countries or regions and for eight broad fields of study.³

A total of 242 institutions responded to the survey, for a response rate of 48%. 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%), 41 of the 50 largest (82%), and 75 of the 100 largest (75%) responded to the survey. The high response rates from these institutions are important because collectively the 100 largest institutions confer about 60% of all graduate degrees awarded annually to international students in the United States. Overall, the 242 institutions responding to the *Phase I* survey conferred about 61% of the approximately 96,000 graduate degrees awarded to international students in the United States in 2008-09, suggesting that the survey results accurately depict recent trends in international applications to U.S. graduate schools.

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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 The *Phase I* survey also included the annual *Pressing Issues Survey* and three questions about application and enrollment management challenges. These results will be analyzed separately and reported in CGS' newsletter, *GradEdge*.

⁴ These figures are based on graduate degrees awarded in academic year 2008-09. 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).

⁵ See footnote 4.

⁶ See footnote 4.

Institutions responding to the *Phase I* survey provided data on a total of 514,298 applications to U.S. graduate schools by prospective 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 campuses, the *Phase I* survey was administered early in their application cycles, before final numbers were known. These institutions provided preliminary applications figures. For that reason, the survey results (described in the next section of this report) should be considered preliminary, subject to revision in the 2012 *Phase II* survey when final applications numbers are reported. Nonetheless, past *Phase I* 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 represented in the *Phase I* survey data, the overall results accurately illustrate the trends in international graduate applications 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 Table 1 on the following page).

The majority of this year's *Phase I* survey respondents reported an increase in applications from prospective international students in 2012. Of the 228 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase I* survey, 136 (60%) reported an increase in international applications for fall 2012, with an average increase of 11% at these institutions. At the 89 institutions (39%) reporting a decrease, the average decline in international applications was 9%. Three institutions (1%) 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. 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

⁷ Bell, N. 2011. *Graduate Enrollment and Degrees: 2000 to 2010*. Washington, DC: Council of Graduate Schools.

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	Preliminary Number of Applications, 2011 to 2012
International Total	4%	9%	11%	9%
Field of Study				
Arts & Humanities	5%	9%	8%	4%
Business	7%	11%	11%	11%
Education	8%	8%	13%	17%
Engineering	3%	8%	14%	12%
Life Sciences	0%	2%	8%	0%
Physical & Earth Sciences	2%	10%	15%	10%
Social Sciences & Psychology	6%	11%	5%	8%
Other Fields	11%	13%	10%	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 II, 2009 to 2011, and Phase 1, 2012

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 I* survey results indicate that international applications increased in all broad fields of study in 2012, with the exception of life sciences, in which applications remained flat between 2011 and 2012. The largest increase in international applications in 2012 occurred in education (17%), but as noted above, few international students are enrolled in this field. Strong growth also occurred in engineering (12%), business (11%), physical & earth sciences (10%), and 'other' fields (also 10%). All four of these broad fields also experienced double-digit growth in 2011 (see Table 1). The smallest gain in international applications in 2012 was in arts & humanities (4%), which follows an 8% increase in this broad field in 2011. International applications in social sciences & psychology rose 8% in 2012, the second smallest gain, following a 5% increase last year.

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

⁸ See Appendix A for the survey taxonomy.

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). 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. 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 18% 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. Not only is China the largest country of origin for international graduate students in the United States, but the growth in applications from China in 2012 outpaced that of all other countries and regions included in the survey.

Graduate applications from prospective students from India increased 2% in 2012 after increasing 8% in 2011, while 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 Mexico (17%) and Brazil (14%). Canada (9%),

⁹ *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.

¹⁰ 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	Preliminary Number of Applications, 2011 to 2012
International Total	4%	9%	11%	9%
Country of Origin				
China	14%	20%	21%	18%
India	-12%	1%	8%	2%
South Korea	-9%	0%	2%	-1%
Taiwan				-2%
Canada				9%
Mexico				17%
Brazil				14%
Region of Origin				
Africa				-5%
Europe				7%
Middle East *	22%	20%	16%	6%

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

Sources: CGS International Graduate Admissions Survey, Phase II, 2009 to 2011, and Phase 1, 2012

Europe (7%), and the Middle East (6%) all experienced gains, but slight declines occurred among applications from prospective students from Africa (-5%) and Taiwan (-2%).

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% in public institutions and 12% in private, not-for-profit institutions in 2012 (see Table 3 on the following page). 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 9% on average at doctoral institutions in 2012, slightly less than the 11% increase

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

¹¹ Of the 228 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase I* survey, 159 were public institutions, and 69 were private, not-for profit institutions.

that occurred in 2011.¹² International applications decreased 8% at master's-focused institutions in 2012, but this decrease is based on a relatively small number of international applications. In the 2012 *Phase I* survey, just 2% of all applications from prospective international students were for admission to master's-focused institutions.¹³

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	Preliminary % 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%	9%
Public	7%	9%	8%
Private, not-for-profit	13%	16%	12%
Master's-Focused Institutions	3%	15%	-8%
Public	3%	16%	-20%
Private, not-for-profit	3%	12%	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 II, 2010 and 2011, and Phase I, 2012

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 15%) and Northeast (9%) in 2011. Increases in international

¹² 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.

¹³ The data for private, not-for-profit master's-focused institutions should be interpreted cautiously given the small number of these institutions responding to the survey.

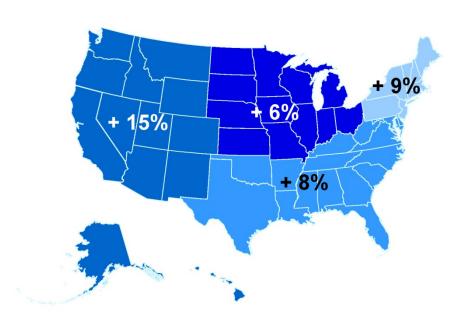


Figure 2. Year-to-Year Percent Change in International Applications by Geographic Region, 2011 to 2012

applications were slightly smaller on average at institutions located in the South (8%) and Midwest (6%).¹⁴

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. ¹⁵

¹⁴ Of the 228 institutions that provided total applications data for both 2011 and 2012 in this year's *Phase I* survey, 34 institutions are located in the West, 61 in the Midwest, 49 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 Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

¹⁵ See footnote 4 for more information.

Increases in international applications in 2012 were stronger on average at institutions awarding large 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 Mexico, India, Europe, Brazil, and China. In contrast, the increase in applications from prospective graduate students from the Middle East was largest on average at the institutions outside the largest 100. For South Korea and Taiwan, decreases in international applications occurred at both the 100 largest institutions and the institutions outside the largest 100, but in both cases, the declines were steeper on average at 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, 2011 to 2012

	All Institutions	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	9%	11%	9%	10%	10%	6%
Country of Origin						
China	18%	20%	18%	20%	19%	14%
India	2%	2%	2%	5%	4%	-5%
South Korea	-1%	-3%	0%	0%	-1%	-5%
Taiwan	-2%	2%	-1%	1%	-1%	-7%
Canada	9%	6%	9%	9%	9%	9%
Mexico	17%	18%	21%	20%	21%	0%
Brazil	14%	4%	22%	19%	15%	9%
Region of Origin						
Africa	-5%	-14%	-8%	-5%	-5%	-5%
Europe	7%	8%	11%	9%	8%	1%
Middle East	6%	5%	0%	1%	3%	14%

Notes: The rankings are based on data collected by the U.S. Department of Education. See footnote 4 for more information. Not all responding institutions provided data by country of origin.

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

III. Summary and Conclusions

Summary

The results of the 2012 CGS International Graduate Admissions Survey, Phase I: Applications indicate 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 flat. The largest gains occurred in education (17%), engineering (12%), business (11%), physical & earth sciences (10%), and 'other' fields (also 10%).

Applications from prospective graduate students from China increased 18% in 2012, marking the seventh consecutive year of double-digit growth. Strong growth also occurred in applications from prospective graduate students from Mexico (17%), Brazil (14%), Canada (9%), Europe (7%), and the Middle East (6%). Applications from prospective graduate students from Africa fell 5% in 2012, with slight declines also occurring for students from Taiwan (-2%) and South Korea (-1%). Applications from prospective Indian graduate students increased 2% 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% in public institutions and up 12% in private, not-for-profit institutions). By Carnegie classification, graduate applications from prospective international students increased 9% at doctoral institutions, but fell 8% at master's-focused institutions.

Increases in international applications in 2012 were stronger on average at institutions awarding large 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.

Conclusions

The data from the 2012 CGS International Graduate Admissions Survey, Phase I: Applications indicate that several recent trends are continuing in 2012. The year-to-year growth in international applications 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 I survey results continue to show that international students are much more likely to apply to doctoral institutions than master's-focused institutions, and that international application growth is stronger at private, for-profit institutions than public institutions.

Applications are a key indicator of interest among international students in U.S. graduate programs, but an application may or may not result in the enrollment of a student in a U.S. graduate program. Changes in the average number of applications per applicant, competition from other countries for international students, decisions by universities on the numbers of applicants to accept for fall 2012, and the dollar value of the financial aid packages offered to prospective international students will all affect the ultimate enrollment of international students in U.S. graduate programs. Although the strong 9% increase in international

applications for fall 2012 suggests that an increase in first-time enrollment is highly likely, the scope of that change will not be revealed until the *Phase II* and *Phase III CGS International Graduate Admissions Surveys* are conducted later this year.

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Appendix A Survey Questionnaire and Taxonomy of Fields of Study



2012 CGS International Graduate Admissions Survey, Phase I: Applications and Pressing Issues Survey

Ins	stituti	on Name:	
Na	me d	of Individual Completing the Survey:	
Ph	one	Number: E-mail:	
Pr	essi	ing Issues Survey	
1.	gra this	important part of the success of CGS is our interest in keeping current with the issues that you face as aduate deans and your willingness to tell us about these issues each year. Our chief vehicle for obtaining information is this annual <i>Pressing Issues Survey</i> . Please list briefly the three most important/pressingues or challenges now on your desk. Please list only one issue/challenge per box.	ng
	a)		
	b)		
	c)		
	to i	ite: These pressing issues can include any issue related to graduate education and should not be limite international graduate education issues. Results from the Pressing Issues Survey will be reported in the by 2012 issue of GradEdge.	
2.	Wh	nat are your biggest challenges in managing <i>international</i> applications and enrollment at the graduate el?	

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(continued on page 2)

3.	Are the management challenges you listed in response to question two unique to international students or do they apply to both domestic students and international students?		
	☐ Unique to international students only		
	☐ Apply to both domestic students and international students		
4.	. Are there additional challenges in managing applications and enrollment for <i>domestic</i> students?		
20	12 CCS International Creducts Admice	iana Curvay, Dhaga li Ann	lications
20	12 CGS International Graduate Admiss	ions Survey, Phase I: App	lications
5.	5. For our on-going effort to monitor international student admissions, please estimate the number of graduate applications your institution received from international students for fall 2011 and fall 2012 as of the same date each year. (For example, fall 2011 applications as of 2/15/11 and fall 2012 applications as of 2/15/12. See pages 4-10 for the instructions, definitions, and taxonomy).		
I. T	I. Total Non-U.S. Citizens Fall 2011 Applications Fall 2012 Applications		
Total Non-U.S. Citizens (see definition on page 4)			
II. Non-U.S. Citizens from Select Countries/Regions of Origin		Fall 2011 Applications	Fall 2012 Applications
Co	untries (see definitions on page 5)		
Chi	na		
Indi	a		
Sou	ıth Korea		
Tai	wan		
Car	nada		
Me	xico		
Bra	zil		
Re	gions (see definitions on page 5)		
Afri	са		
Fur	ope		

(continued on page 3)

Middle East

III. Total Non-U.S. Citizens by Field of Study (see definitions on page 5)	Fall 2011 Applications	Fall 2012 Applications
Arts & Humanities		
Business		
Education		
Engineering		
Life Sciences		
Physical & Earth Sciences (incl. Math & Comp. Sci.)		
Social Sciences & Psychology		
Other Fields		

Please submit your survey by Friday, February 24, 2012. Click the "Submit by E-mail" button below to send your completed survey to CGS.

Questions?

If you have problems submitting your survey electronically, please contact Josh Mahler at (202) 461-3862 or imahler@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.

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SURVEY INSTRUCTIONS AND DEFINITIONS

About the Survey:

The 2012 CGS International Graduate Admissions Survey, Phase I: Applications and Pressing Issues Survey is being sent to all U.S. colleges and universities that are members of the Council of Graduate Schools (CGS) as of January 2012 in order to provide an initial snapshot of graduate school applications for fall 2012. The survey asks institutions to report the numbers of applications for admission to graduate certificate and degree programs from 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.

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 Question 5):

- Please provide international applications data for fall 2011 and fall 2012 as of the same date each year. For
 example, if you provide data for fall 2011 applications as of 2/15/11, provide fall 2012 applications data as of
 2/15/12. Since we are measuring changes in applications from year to year, it is important that we compare
 data from the same point in time each year.
- The Phase I survey collects data on <u>applications</u>, not applicants. If a student applied to more than one graduate program, both applications should be counted and included in your survey data.
- 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 to graduate certificate, master's
 degree, education specialist, and doctoral degree programs offered by ALL divisions, schools, colleges, or
 departments of your institution. See 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 graduate certificate and degree programs. At the master's level, include data for all students applying for admission to all master of science (M.S.) and master of arts (M.A.) programs, as well as data for students applying for admission 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 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 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 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, "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 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, Cyprus, 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 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 I 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 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 I 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, February 24, 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 and Humanities, Other **EDUCATION** Arts - History, Theory, and Linguistic, Comparative, and **Education Administration** Criticism Related Language Studies and **Educational Administration** Art History, Criticism, and Educational Leadership Services Conservation Humanities/Humanistic Studies **Educational Supervision** Liberal Arts and Sciences/Liberal **Curriculum and Instruction** Ethnomusicology Music History, Literature, and Curriculum and Instruction Arts Theory Arts and Humanities, Other **Early Childhood Education** Musicology Early Childhood Education and Theatre Literature, History and **BUSINESS** Teaching Accounting Kindergarten/Preschool Education Criticism Arts - History, Theory, and Accounting and Teaching **Elementary Education** Criticism. Other Auditing Arts - Performance and Studio Elementary Education and **Taxation** Arts, Entertainment, and Media **Banking and Finance** Teaching Management Banking and Financial Support Elementary-Level Teaching Fields **Educational Assessment**, Crafts/Craft Design Services **Evaluation, and Research** Dance Credit Management Design and Applied Arts Financial Planning and Services Educational Assessment, Testing, International Finance Drama/Theatre Arts and Measurement Film/Video and Photographic Arts Investments and Securities Educational Evaluation and Fine and Studio Arts Public Finance Research **Business Administration and Educational Psychology** Music Arts - Performance and Studio, Educational Statistics and Management Other Business Administration and Research Methods **English Language and Literature** Management Learning Sciences American Literature **Business Operations** School Psychology English Language and Literature Business/Commerce, General **Higher Education English Literature** Construction Management **Higher Education** Rhetoric and Composition/Writing E-Commerce Higher Education Administration Studies Entrepreneurship Secondary Education English Language and Literatures, Hospitality Administration/ Secondary Education and Other Management Teaching Secondary-Level Teaching Fields Foreign Languages and **Human Resources Development** Literatures **Special Education Human Resources Management** African Languages and Literatures Labor and Industrial Relations Education/Teaching of Students American Sign Language Logistics and Supply Chain w/ Specific Disabilities Asiatic Languages and Literatures Education/Teaching of Students Management Celtic Languages and Literatures **Operations Management** w/ Specific Learning Disabilities Classics and Classical Languages Organizational Leadership Education/Teaching of the Gifted and Literatures Organizational Management and Talented Germanic Languages and **Project Management** Special Education and Teaching Literatures **Small Business Operations** Other Special Education Fields Student Counseling and Iranian/Persian Languages and Sport and Fitness Literatures Administration/Management **Personnel Services** College Student Counseling and Modern Greek Language and **Telecommunications Management** Business Administration and Personnel Services Literature Romance Languages and Management, Other Counselor Education Literatures **Business, Other** School Counseling and Guidance Slavic, Baltic, and Albanian **Business Statistics** Services Languages and Literatures Business/Corporate Student Counseling and Foreign Languages and Communications Personnel Services, Other Literatures, Other Business/Managerial Economics **Education, Other** Adult and Continuing Education History Insurance American History International Business Bilingual, Multilingual, and European History Management Information Systems Multicultural Education History and Philosophy of Science Management Science Education, General and Technology Marketing Educational/Instructional Media

Marketing Management Merchandising

Business Fields, Other

Real Estate

Council of Graduate Schools

History, General

History, Other **Philosophy**

Ethics

Logic

Philosophy

Philosophy, Other

Health and Physical Education

International and Comparative

Junior High/Middle School

Education and Teaching

Education

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

Systematics

Microbiological Sciences
Molecular Biology
Molecular Medicine
Neurosciences
Parasitology
Pathology
Pharmacology
Physiology
Population Biology

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

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

Biological Oceanography

Earth Sciences

Geological Sciences

Geophysics and Seismology

Geosciences

Hydrology

Marine Biology

Marine Sciences

Meteorology

Oceanography

Paleontology

Earth, Atmospheric, and Marine

Mathematical Sciences

Actuarial Science

Applied Mathematics

Mathematics

Statistics

Mathematical Sciences, Other

Physics & Astronomy

Acoustics

Astronomy

Astrophysics

Atomic/Molecular Physics

Condensed Matter and Materials

Physics

Elementary Particle 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, General

Science Technologies

Physical Sciences, Other

SOCIAL SCIENCES & PSYCHOLOGY

Anthropology and Archaeology

Anthropology

Archaeology

Economics

Applied Economics

Econometrics

Fconomics

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

Sociology

Rural 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 Advertisina

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

Family and Consumer Sciences,

Library and Archival Studies

Archives/Archival Administration

Other

Community Organization and

Advocacy

Religion and Theology

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

Other Fields

Legal Research and Professional Studies (excluding L.L.B. and

J.D.)

Military Technologies

Other Fields Not Previously Classified

Studies

Housing and Human

Environments

Human Development

Human Sciences

Work and Family Studies

Other

Library and Information Science Library and Archival Sciences,

Public Administration

Public Administration

Philosophy and Religious Studies,

Social Work, Other

Fire Protection Homeland Security

Interdisciplinary Studies

Multidisciplinary Studies

and Telecommunications

Atmospheric Sciences

Geochemistry

Sciences. Other

Probability

Nuclear Physics

Physical Sciences, Other

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