



INTERNATIONAL GRADUATE APPLICATIONS AND ENROLLMENT: FALL 2020

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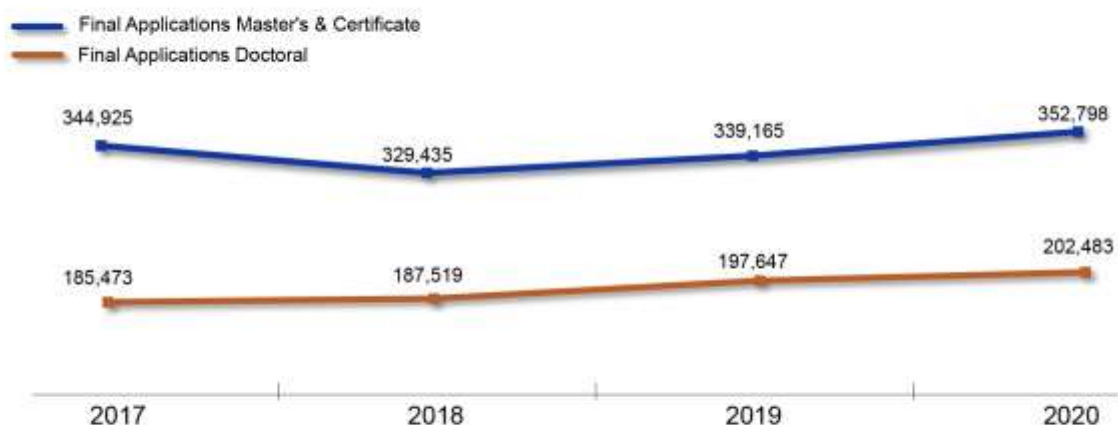
KEY TAKEAWAYS

The number of applications received from prospective international graduate students by U.S. institutions in the CGS International Graduate Admissions Survey increased for both master's and doctoral programs. Doctoral applications have continued to grow since the Fall 2017 cycle, master's applications since the Fall 2018 cycle. Compared to Fall 2019 figures, however, first-time enrollment has declined substantially for both master's and doctoral programs in Fall 2020. The decline is likely due to the COVID-19 pandemic. According to the survey, a large share of admitted students for Fall 2020 deferred their offers until later academic terms.

While this report does not directly investigate the impact of the pandemic, the CGS International Graduate Admissions Survey has been, since 2004, a reliable first look at application and enrollment patterns for master's and doctoral students coming to the United States from abroad. This report includes the Fall 2020 admissions data received from 326 U.S. colleges and universities with 69% from public universities and 65% from doctoral universities ([Table D.1](#)). The Fall 2020 data are combined with historical enrollment data for trend analysis. Only those institutions who submitted their records for two time points are included in the computation. More methodological notes can be found in the [Notes and Definitions](#). With those caveats, in the section that follows, we offer context and additional takeaways from the Fall 2020 admission cycle data. Supplementary data tables are included at the end of the report.

The Largest Volume of International Graduate Applications. The total number of international graduate applications received by U.S. degree-granting institutions participating in the CGS International Graduate Admissions Survey increased by 3% between Fall 2019 and Fall 2020, the same increase as between Fall 2018 and Fall 2019 ([Table A.1](#)). The number of applications for master's & certificate programs for Fall 2020 exceeded that for Fall 2017, the prior record high, and doctoral applications have also increased (Figure 1). These increases were driven by increases at Doctoral Universities. Both master's and doctoral applications increased across different institution types. (See more details in the additional data tables for CGS members)

Figure 1. Total International Graduate Applications by Degree Type, Fall 2017 to Fall 2020



Data Source: Council of Graduate Schools, International Graduate Applications and Enrollment, 2017-2020. Note: Not all responding institutions provided valid data for all the sections of the survey (i.e., final applications, offers of admission, first-time enrollment, and total enrollment). The number of institutions included in the master's applications (n=196) and doctoral applications (n=158).

Significant Decline in First-time Enrollment. First-time graduate enrollment decreased by 39% between Fall 2019 and Fall 2020. Both master's (-43%) and doctoral (-26%) first-time enrollment of international graduate students declined ([Table A.2](#)). The decline was consistent across institutional types. The master's & certificate first-time enrollment decreased by 46% at Doctoral Universities Very High Research Activity and by 41% at Doctoral Universities High Research Activity and Doctoral/Professional Universities.

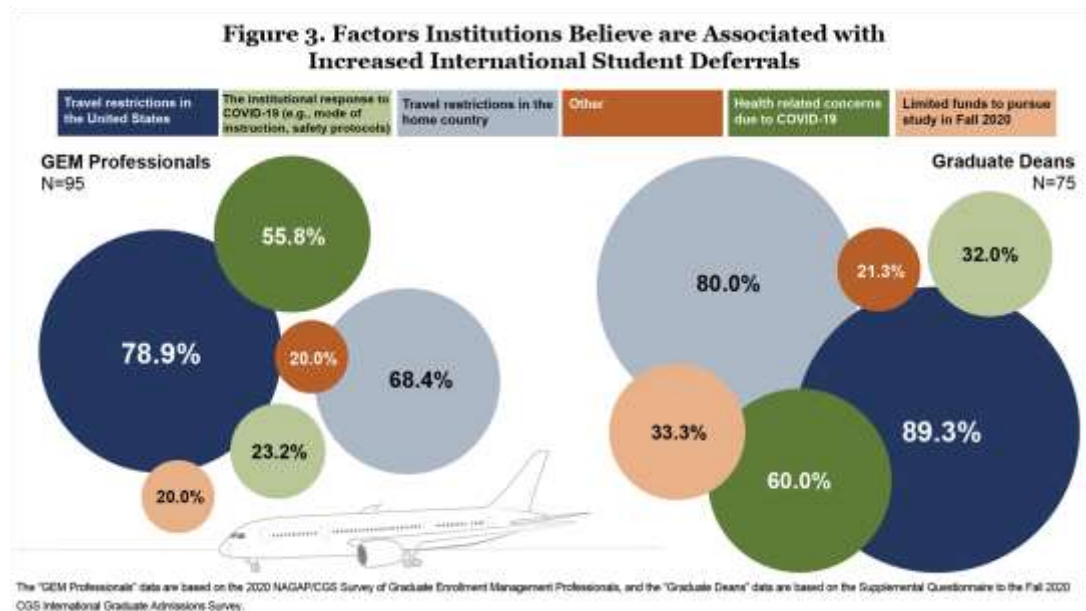
Although the decline in first-time enrollment was substantial, there were also many offers of admissions for Fall 2020 that have been deferred to future academic terms. In particular, at the master's and certificate level, of the offers of admissions made, 12% were deferred and 17% enrolled for the first time in Fall 2020. At the doctoral level, 10% of the offers of admissions were deferred and 33% enrolled for the first-time ([Table B.4](#)). The sum of the deferred admissions and first-time enrollment for Fall 2020 exceeds the first-time enrollment figures for Fall 2019 (Figure 2).

Figure 2. First-time International Graduate Enrollment by Degree Type, Fall 2017 to Fall 2020



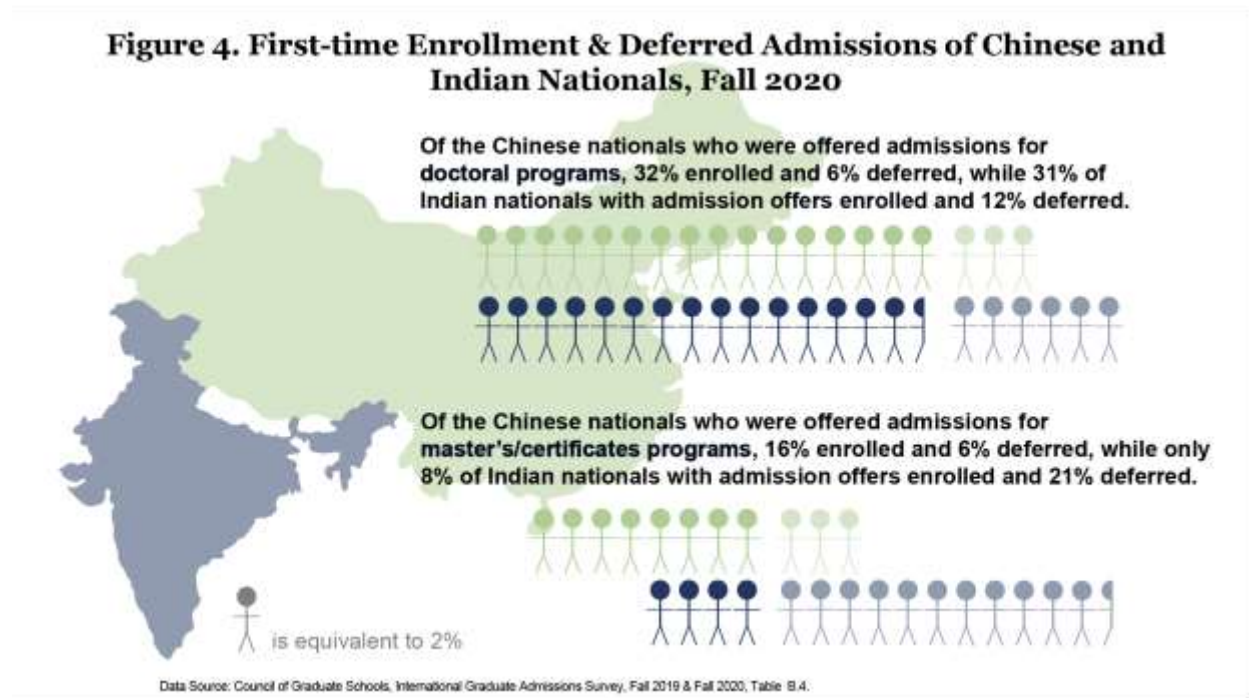
Data Source: Council of Graduate Schools, International Graduate Applications and Enrollment, 2017-2020. Note: Not all responding institutions provided valid data for all the sections of the survey (i.e., final applications, offers of admission, first-time enrollment, and total enrollment). The number of institutions included in the master's first-time enrollment (n=180) and doctoral first-time enrollment (n=132).

To ensure a complete and consistent understanding of the context of graduate enrollment over the past year, CGS conducted two additional surveys to collect information that was not included in the 2020 International Graduate Applications and Enrollment Survey: the 2020 NAGAP/CGS Survey of Graduate Enrollment Management and the 2020 CGS International Graduate Admissions Supplemental Survey. Of those surveyed from both the NAGAP/CGS Survey of Graduate Enrollment Management Professionals and the Supplemental Questionnaire over 80% reported an increase in the number of newly admitted international graduate students who deferred enrollment in Fall 2020. Furthermore, more institutions have reported that the increase of deferred enrollment is significant – that increase is greater than 5%. This suggests that the large volume of deferrals reported in the 2020 CGS International Graduate Admissions Survey is an anomaly. Most respondents to both surveys noted travel restrictions in the United States and their home countries as the leading factors for the increased deferrals in Fall 2020. Over half the institutions indicated that health-related concerns due to the COVID-19 pandemic also explained the increased deferrals.



Approximately 92% of institutions from both surveys utilized e-mails to stay in touch with prospective international graduate students who deferred enrollment in Fall 2020. Over half of the institutions also hosted virtual events to stay connected. In general, the international enrollment deferral and outreach efforts in Fall 2020, as reported from the two surveys, are consistent and not entirely unexpected. Across all survey results, there is a general trend towards more deferments associated with visa issues worldwide, and it is evident that a large proportion of institutions kept students engaged through virtual formats.

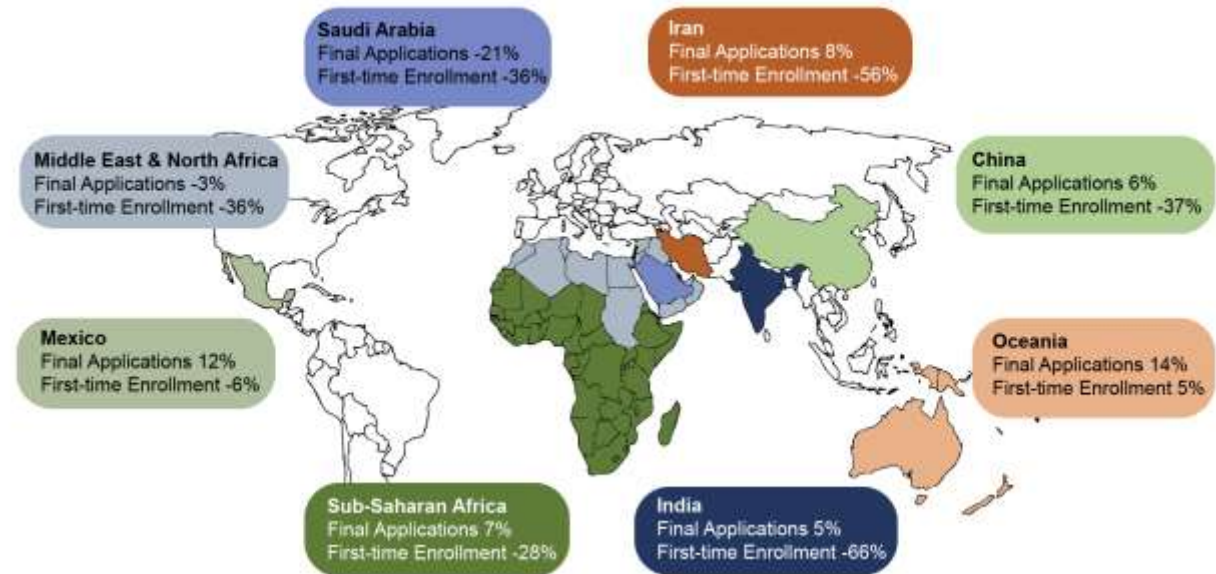
Other Key Points. Graduate applications of **Chinese nationals (6%)** and **Indian nationals (5%)** both increased between Fall 2019 and Fall 2020 admission cycles. However, first-time graduate enrollment declined by 37% and 66%, respectively. This is explained in part by the higher number of admissions deferrals by Indian nationals. Of the Indian nationals who were offered admissions to U.S. graduate schools for master's/certificates and doctoral programs, 21% and 12% respectively, deferred. By contrast, only 6% of offers made to Chinese nationals for Fall 2020 admissions were deferred (Figure 4, Tables [A.1](#), [A.2](#) and [B.4](#)).



Although first-time enrollment continued to decline, graduate applications to U.S. institutions from **Iranian nationals** increased for two consecutive admissions cycles, growing by 8% between Fall 2019 and Fall 2020. Iranian nationals, who accounted for more than one-half of the offers of doctoral admissions made to individuals from the [Middle East & North Africa](#) region, also accounted for 27% of offers deferred in Fall 2020. Only 13% of offers of doctoral admissions to Iranian nationals converted to first-time enrollment, compared to 33% for the overall offers of doctoral admissions to prospective international students ([Tables A.1](#) and [B.4](#)).

Other regions showed more positive developments. Although it is the region with the fewest number of international graduate students in the United States, the number of applications and first-time enrollment of graduate students from [Oceania](#) increased by 14% and 5%, respectively between Fall 2019 and Fall 2020. Also, the number of first-time international graduate students in the United States from **Canada** (-5%) and **Mexico** (-6%) did not decline as much as the other countries and regions did (Figure 5, [Tables A.1](#) and [A.2](#)).

Figure 5. One-year Change in International Graduate Applications & First-time Enrollment by Selected Country & Region of Origin between Fall 2019 and Fall 2020



Data Source: Council of Graduate Schools, International Graduate Applications and Enrollment, Fall 2020, Tables A1 & A2.

In terms of the graduate application trends by fields of study, **Biological & Agricultural Sciences** (10%) and **Mathematics & Computer Sciences** (12%) continued robust growth. The volatility of Engineering applications may be plateauing, and there was no change in graduate applications in Engineering between Fall 2019 and Fall 2020. While still one of the largest broad fields, **Business** (-1%) continued to experience decreases in international graduate applications during this period. There were a large number of deferred offers received by participating institutions across all fields at both the master's and doctoral level. The share of international graduate students who deferred offers in master's degree admissions in Engineering was 16%, and the share in deferred offers of admissions in Mathematics & Computer Sciences was 15%. At the doctoral level, the largest shares of deferred offers were in Public Administration & Services (15%), Biological & Agricultural Sciences (12%), and Engineering (12%) ([Tables A.3](#) and [C.4](#)).

Discussion. The Fall 2020 CGS International Graduate Admissions Survey data offer an important snapshot of the state of international graduate enrollment at U.S. institutions. Given that nearly one out of five U.S. master's and doctoral students are international students (Okahana, Zhou, & Gao, 2020), the trend data we offer are critical information for graduate education administrators and enrollment management professionals. Our analysis is based on about 280 U.S. based institutions, predominantly doctoral universities ([Table D.2](#)). Our data reflect those from many of the institutions with the largest graduate program offerings ([see full listing of the participating institutions](#)), though readers should note that the analysis is not a census, but a subset of institutions. The national, aggregate data in this report provide important benchmarks to inform recruitment, admissions, and other enrollment management decisions (Okahana & West, 2019).

The overall increase in international graduate students' applications to U.S. institutions participating in this survey is encouraging, particularly given what seems to be a rebound from the decline we experienced between Fall 2016 and Fall 2017, and again in Fall 2018. However, due to factors such as the suspension of U.S. consular activities and the border closures in response to the COVID-19 pandemic, many new international graduate students were unable to begin their studies in Fall 2020. Results are consistent with an earlier report that the

global pandemic has impacted the flow of international graduate students to the U.S. (Baer & Martel, 2020). Many institutions have reported increased deferred admissions cases in Fall 2020, compared to the prior years. In fact, 12% of offers of master's admissions and 10% of offers of doctoral admissions to prospective international graduate students were deferred in Fall 2020 ([Table B.4](#)). We estimate that had it not been for the global pandemic, we might have more international graduate students enrolled at U.S. institutions in Fall 2020 than Fall 2019.

The total enrollment of master's international graduate students declined over the past year. This is not surprising given the substantial declines in first-time enrollment and relatively quick turnover of master's students. The number of continuing international doctoral students, however, appears to have increased between Fall 2019 and Fall 2020. This might reflect the fact that the cycle of doctoral degree programs is much longer than master's programs. Some students may have opted to postpone their graduation, given the present circumstance.

Looking to the Fall 2021 admissions cycle and beyond, we remain optimistic about the overall appeal and attractiveness of U.S. graduate education to international talents. However, it remains uncertain how larger than usual volumes of deferred admissions will impact new enrollment for Fall 2021 and enrollment management strategies going forward.

DATA TABLES

Annual Changes Between Fall 2015 and Fall 2020 Admission Cycles

Table A.1 Annual Changes in Final International Graduate Applications by Region/Country of Origin, Fall 2015 to Fall 2020 Admission Cycles

| | Fall 2015 to Fall 2016 | Fall 2016 to Fall 2017 | Fall 2017 to Fall 2018 | Fall 2018 to Fall 2019 | Fall 2019 to Fall 2020 |
|---------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Total | 1% | -3% | -4% | 3% | 3% |
| Asia | 2% | -5% | -3% | 3% | 5% |
| <i>China</i> | 4% | -1% | 0% | 3% | 6% |
| <i>India</i> | -1% | -15% | -12% | 0% | 5% |
| <i>Japan</i> | - | -11% | -6% | 13% | -1% |
| <i>South Korea</i> | -5% | -8% | 0% | -6% | 3% |
| <i>Taiwan</i> | 1% | 0% | 0% | 3% | 11% |
| Europe | 0% | 18% | -13% | 0% | -12% |
| Latin America & Caribbean | -3% | -4% | 4% | -3% | -5% |
| <i>Brazil</i> | -11% | 9% | 1% | -2% | -12% |
| <i>Mexico</i> | 2% | -14% | -4% | 4% | 12% |
| Middle East & North Africa | -5% | -17% | -14% | -1% | -3% |
| <i>Iran</i> | - | -18% | -27% | 2% | 8% |
| <i>Saudi Arabia</i> | -20% | -21% | -6% | -5% | -21% |
| North America (Canada only) | -12% | -9% | 0% | 3% | 2% |
| Oceania | -11% | -7% | -3% | 3% | 14% |
| Sub-Saharan Africa | -9% | 12% | 28% | 11% | 7% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Between the Fall 2019 and Fall 2020 admission cycles, total applications from prospective international graduate students at responding institutions increased by 3%. Applications from prospective graduate students in Europe (-12%), Latin America & Caribbean (-5%), and the Middle Eastern & North African region (-3%) declined. Additionally, graduate applications from Brazilian (-12%) and Saudi Arabian (-21%) students continued to decline, while Chinese (6%) applications increased to U.S. institutions over two consecutive years, after no change in counts between the Fall 2017 and Fall 2018 admission cycles.

Table A.2 Annual Changes in First-time International Graduate Enrollment by Region/Country of Origin, Fall 2015 to Fall 2020 Admission Cycles

| Table A.2 Annual Changes in First-time International Graduate Enrollment by Region/Country of Origin, Fall 2015 to Fall 2020 Admission Cycles | | | | | |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Fall 2015 to Fall 2016 | Fall 2016 to Fall 2017 | Fall 2017 to Fall 2018 | Fall 2018 to Fall 2019 | Fall 2019 to Fall 2020 |
| Total | 5% | -1% | 1% | 4% | -39% |
| Asia | 8% | -2% | 1% | 6% | -47% |
| <i>China</i> | 0% | 5% | 1% | 3% | -37% |
| <i>India</i> | -7% | -13% | 0% | 1% | -66% |
| <i>Japan</i> | - | 3% | -17% | 8% | -20% |
| <i>South Korea</i> | 10% | -12% | -4% | 1% | -11% |
| <i>Taiwan</i> | 14% | 10% | 1% | 5% | -35% |
| Europe | 8% | 1% | -3% | -3% | -26% |
| Latin America & Caribbean | 5% | -10% | 4% | 0% | -20% |
| <i>Brazil</i> | -9% | 18% | -2% | -7% | -33% |
| <i>Mexico</i> | 12% | -10% | -5% | 10% | -6% |
| Middle East & North Africa | -11% | -5% | -12% | 0% | -36% |
| <i>Iran</i> | - | -16% | -10% | -7% | -56% |
| <i>Saudi Arabia</i> | -13% | -2% | -18% | 1% | -36% |
| North America (Canada only) | -3% | -7% | 3% | 6% | -5% |
| Oceania | 7% | -6% | -9% | 7% | 5% |
| Sub-Saharan Africa | 3% | 27% | 19% | 22% | -28% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Compared to Fall 2019, first-time international graduate enrollment in Fall 2020 decreased by 39%, almost certainly because of the pandemic. There were substantial decreases in first-time graduate enrollment in the Asian (-47%) and Middle Eastern & North African (-36%) regions. In particular, the number of Indian first-time graduate students decreased by 66% this past year. There was a 37% decrease in first-time graduate enrollment for Chinese nationals. First-time graduate enrollment for students hailing from Saudi Arabia dropped by 36%, and Iranian first-time graduate enrollment decreased by 56% between Fall 2019 and Fall 2020. In addition, Sub-Saharan African (-28%) first-time graduate enrollment declined. Compared to Asian and Middle East & North Africa, Europe (-26%), Latin America & Caribbean (-20%), and Canada (-5%) reported smaller declines in first-time graduate enrollment. Another notable finding is that Oceania first-time graduate enrollment increased by 5%.

Table A.3 Annual Changes in Final International Graduate Applications by Field of Study, Fall 2015 to Fall 2020 Admission Cycles

| Table A.3 Annual Changes in Final International Graduate Applications by Field of Study, Fall 2015 to Fall 2020 Admission Cycles | | | | | |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Fall 2015 to Fall 2016 | Fall 2016 to Fall 2017 | Fall 2017 to Fall 2018 | Fall 2018 to Fall 2019 | Fall 2019 to Fall 2020 |
| Total | 1% | -3% | -4% | 3% | 3% |
| Arts & Humanities | 2% | -9% | 1% | 6% | -1% |
| Biological & Agricultural Sciences | -5% | -5% | 3% | 14% | 10% |
| Business | 8% | -3% | -8% | -3% | -1% |
| Education | 0% | -11% | 4% | 2% | -4% |
| Engineering | -3% | -10% | -16% | -2% | 0% |
| Health Sciences | -17% | -11% | 5% | 7% | 2% |
| Mathematics & Computer Sciences | 5% | -2% | 6% | 7% | 12% |
| Physical & Earth Sciences | 6% | -6% | -9% | 2% | 17% |
| Public Administration & Services | -7% | -15% | -1% | 1% | -12% |
| Social & Behavioral Sciences | -3% | -1% | 3% | 3% | 6% |
| Other Fields | 14% | -2% | 8% | 23% | -16% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Table A.4 Annual Changes in First-time International Graduate Enrollment by Field of Study, Fall 2015 to Fall 2020 Admission Cycles

| Table A.4 Annual Changes in First-time International Graduate Enrollment by Field of Study, Fall 2015 to Fall 2020 Admission Cycles | | | | | |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Fall 2015 to Fall 2016 | Fall 2016 to Fall 2017 | Fall 2017 to Fall 2018 | Fall 2018 to Fall 2019 | Fall 2019 to Fall 2020 |
| Total | 5% | -1% | 1% | 4% | -39% |
| Arts & Humanities | 6% | -12% | -7% | 0% | -32% |
| Biological & Agricultural Sciences | 2% | -1% | -4% | 10% | -35% |
| Business | 7% | -11% | -7% | -2% | -41% |
| Education | 7% | -16% | -31% | 9% | -33% |
| Engineering | -3% | -10% | -17% | 1% | -52% |
| Health Sciences | -14% | 3% | -16% | 8% | -38% |
| Mathematics & Computer Sciences | 4% | 2% | 1% | 11% | -53% |
| Physical & Earth Sciences | -3% | -1% | -15% | 6% | -33% |
| Public Administration & Services | 7% | 4% | -49% | 8% | -51% |
| Social & Behavioral Sciences | 9% | 0% | -6% | 11% | -28% |
| Other Fields | 11% | 4% | -2% | 9% | -46% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Fall 2020 International Graduate Admissions Data by Region/Country of Origin

Table B.1 Final International Graduate Applications by Region/Country of Origin, Fall 2020 Admission Cycle

| | % Shares by Region/Country of Origin | | | % Shares by Degree Objective | |
|---------------------------------------|--------------------------------------|------------------------|----------------|------------------------------|------------|
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 805,711 | 528,101 | 277,610 | 66% | 34% |
| Asia | 81% | 86% | 72% | 69% | 31% |
| <i>China</i> | <i>42%</i> | <i>43%</i> | <i>39%</i> | <i>68%</i> | <i>32%</i> |
| <i>India</i> | <i>27%</i> | <i>34%</i> | <i>13%</i> | <i>83%</i> | <i>17%</i> |
| <i>Japan</i> | <i>1%</i> | <i>0%</i> | <i>1%</i> | <i>62%</i> | <i>38%</i> |
| <i>South Korea</i> | <i>3%</i> | <i>2%</i> | <i>7%</i> | <i>31%</i> | <i>69%</i> |
| <i>Taiwan</i> | <i>3%</i> | <i>3%</i> | <i>3%</i> | <i>62%</i> | <i>38%</i> |
| Europe | 5% | 3% | 8% | 40% | 60% |
| Latin America & Caribbean | 3% | 2% | 4% | 53% | 47% |
| <i>Brazil</i> | <i>1%</i> | <i>0%</i> | <i>1%</i> | <i>51%</i> | <i>49%</i> |
| <i>Mexico</i> | <i>1%</i> | <i>0%</i> | <i>1%</i> | <i>52%</i> | <i>48%</i> |
| Middle East & North Africa | 5% | 3% | 9% | 38% | 62% |
| <i>Iran</i> | <i>2%</i> | <i>1%</i> | <i>5%</i> | <i>20%</i> | <i>80%</i> |
| <i>Saudi Arabia</i> | <i>1%</i> | <i>1%</i> | <i>2%</i> | <i>57%</i> | <i>43%</i> |
| North America (Canada only) | 1% | 1% | 2% | 54% | 46% |
| Oceania | 0% | 0% | 0% | 51% | 49% |
| Sub-Saharan Africa | 5% | 5% | 5% | 65% | 35% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Prospective Chinese and Indian students accounted for 69% of the more than 805,000 international graduate applications received by institutions responding to the 2020 CGS International Graduate Admissions Survey. Graduate applications submitted by Indian nationals accounted for 27% of all international applications. The share of Indian nationals' (34%) master's and certificate applications increased by three percentage points. Chinese nationals (42%) had a decreased share of master's and certificate applications by four percentage points from last year. Prospective Chinese graduate students sent more than one third of the total international doctoral applications (39%) during the Fall 2020 admission cycle, topping India by more than 26 percentage points.

For those applicants whose degree levels were reported, overall, about two thirds (66%) submitted applications for master's and certificate programs and 34% submitted applications for doctoral degree programs. The vast majority of graduate applications from Indian nationals (83%) continue to be for master's and certificate programs. By contrast, a large majority of applications from Iran (80%) and the Republic of Korea (South Korea, 69%) were for doctoral programs. Similarly, 62% of applications from the Middle East & North Africa and 60% of applications from Europe were for doctoral programs.

Table B.2 Offers of Admission to International Graduate Applicants by Region/Country of Origin, Fall 2020 Admission Cycle

| Table B.2 Offers of Admission to International Graduate Applicants by Region/Country of Origin, Fall 2020 Admission Cycle | | | | | |
|---|--------------------------------------|------------------------|---------------|------------------------------|------------|
| | % Shares by Region/Country of Origin | | | % Shares by Degree Objective | |
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 264,727 | 220,722 | 44,005 | 83% | 17% |
| Asia | 82% | 85% | 70% | 86% | 14% |
| <i>China</i> | 42% | 43% | 36% | 86% | 14% |
| <i>India</i> | 29% | 32% | 12% | 93% | 7% |
| <i>Japan</i> | 1% | 1% | 1% | 79% | 21% |
| <i>South Korea</i> | 2% | 2% | 6% | 57% | 43% |
| <i>Taiwan</i> | 2% | 2% | 3% | 83% | 17% |
| Europe | 4% | 3% | 8% | 68% | 32% |
| Latin America & Caribbean | 3% | 3% | 6% | 74% | 26% |
| <i>Brazil</i> | 1% | 1% | 1% | 71% | 29% |
| <i>Mexico</i> | 1% | 1% | 1% | 74% | 26% |
| Middle East & North Africa | 4% | 3% | 10% | 60% | 40% |
| <i>Iran</i> | 1% | 1% | 5% | 39% | 61% |
| <i>Saudi Arabia</i> | 1% | 1% | 2% | 73% | 27% |
| North America (Canada only) | 1% | 1% | 2% | 78% | 22% |
| Oceania | 0% | 0% | 1% | 75% | 25% |
| Sub-Saharan Africa | 5% | 5% | 5% | 83% | 17% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Eighty-three percent of Fall 2020 admission offers made to prospective international graduate students were for master's/certificate programs. Regions/countries of origin with higher concentrations of doctoral applications did not necessarily receive offers of admission in the same proportion. For example, 68% of graduate applications from Europe were made in master's and certificate programs, but only 32% of admission offers were for doctoral programs. Similarly, 57% of South Korean applications were for master's/certificate programs, but only 43% of admission offers were for doctoral programs.

Table B.3 First-time International Graduate Enrollment by Region/Country of Origin, Fall 2020 Admission Cycle

| Table B.3 First-time International Graduate Enrollment by Region/Country of Origin, Fall 2020 Admission Cycle | | | | | |
|--|--------------------------------------|------------------------|---------------|------------------------------|------------|
| | % Shares by Region/Country of Origin | | | % Shares by Degree Objective | |
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 51,613 | 37,056 | 14,557 | 72% | 28% |
| Asia | 71% | 73% | 67% | 72% | 28% |
| <i>China</i> | <i>41%</i> | <i>43%</i> | <i>34%</i> | <i>75%</i> | <i>25%</i> |
| <i>India</i> | <i>15%</i> | <i>16%</i> | <i>11%</i> | <i>78%</i> | <i>22%</i> |
| <i>Japan</i> | <i>1%</i> | <i>1%</i> | <i>1%</i> | <i>73%</i> | <i>27%</i> |
| <i>South Korea</i> | <i>4%</i> | <i>3%</i> | <i>8%</i> | <i>51%</i> | <i>49%</i> |
| <i>Taiwan</i> | <i>3%</i> | <i>3%</i> | <i>2%</i> | <i>71%</i> | <i>29%</i> |
| Europe | 8% | 7% | 10% | 63% | 37% |
| Latin America & Caribbean | 8% | 7% | 8% | 70% | 30% |
| <i>Brazil</i> | <i>1%</i> | <i>1%</i> | <i>1%</i> | <i>66%</i> | <i>34%</i> |
| <i>Mexico</i> | <i>2%</i> | <i>2%</i> | <i>2%</i> | <i>72%</i> | <i>28%</i> |
| Middle East & North Africa | 5% | 4% | 7% | 60% | 40% |
| <i>Iran</i> | <i>1%</i> | <i>1%</i> | <i>2%</i> | <i>37%</i> | <i>63%</i> |
| <i>Saudi Arabia</i> | <i>2%</i> | <i>2%</i> | <i>2%</i> | <i>71%</i> | <i>29%</i> |
| North America (Canada only) | 3% | 4% | 3% | 77% | 23% |
| Oceania | 1% | 1% | 1% | 73% | 27% |
| Sub-Saharan Africa | 5% | 5% | 5% | 68% | 32% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Of the over 51,613 first-time international graduate students enrolled in U.S. institutions in the Fall of 2020, approximately three quarters (71%) were from Asia, with Chinese nationals (41%) comprising the vast share. Though the share of Indian nationals decreased from Fall 2019, the overall representation of Asian international students remains substantial in master's and certificate programs, accounting for 73% of all first-time students. China (43%) and India (16%) claimed the largest shares. China's share of first-time doctoral students (34%) was larger than that of India (11%), the Middle East & North Africa (7%), and Europe (10%).

The degree objectives of international students also varied by area. For example, first-time Indian graduate students were predominantly (78%) in master's and certificate programs, compared to 72% for students from all countries and regions. In contrast, three quarters (63%) of first-time graduate enrollment of Iranian nationals and 49% of Korean nationals were in doctoral programs.

Table B.4 Deferred Admissions and First-time International Graduate Enrollment as Percentage Shares of Offers of Admission by Region/Country of Origin, Fall 2020 Admission Cycle

| | Master's & Certificate | | | Doctorates | | |
|-----------------------------|------------------------|------------|------------|----------------------|------------|------------|
| | Offers of Admissions | % Deferred | % Enrolled | Offers of Admissions | % Deferred | % Enrolled |
| Total | 220,722 | 12% | 17% | 44,005 | 10% | 33% |
| Asia | 184,449 | 13% | 14% | 30,259 | 8% | 32% |
| China | 92,971 | 6% | 16% | 15,605 | 6% | 32% |
| India | 69,904 | 21% | 8% | 5,078 | 12% | 31% |
| Japan | 1,167 | 8% | 28% | 303 | 4% | 40% |
| South Korea | 3,705 | 7% | 30% | 2,749 | 4% | 39% |
| Taiwan | 5,131 | 10% | 17% | 1,088 | 6% | 32% |
| Europe | 7,328 | 8% | 33% | 3,431 | 6% | 41% |
| Latin America & Caribbean | 6,703 | 8% | 38% | 2,391 | 7% | 47% |
| Brazil | 1,164 | 8% | 33% | 477 | 10% | 41% |
| Mexico | 1,312 | 6% | 44% | 462 | 5% | 49% |
| Middle East & North Africa | 6,086 | 14% | 24% | 4,133 | 23% | 23% |
| Iran | 1,477 | 18% | 12% | 2,270 | 27% | 13% |
| Saudi Arabia | 2,019 | 13% | 28% | 759 | 21% | 30% |
| North America (Canada only) | 3,019 | 6% | 40% | 830 | 3% | 45% |
| Oceania | 732 | 9% | 34% | 247 | 2% | 38% |
| Sub-Saharan Africa | 9,914 | 17% | 16% | 2,085 | 15% | 35% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Institutions responding to the 2020 CGS International Graduate Admissions Survey presented a total of 220,772 offers of admissions to prospective graduate students in Fall 2020. In 2020, international applicants deferred more offers of acceptance than in a normal year. Approximately 12% of master's offers of admissions and 10% of doctoral offers of admissions were deferred to future semesters in Fall 2020. By region, Sub-Saharan Africa, Middle East & North Africa, and Asia had large shares of deferred offers at both the master's and certificate and the doctoral levels. For example, 21% of master's and certificate offers of admissions to Indian graduate students in Fall 2020 were deferred. Furthermore, at the doctoral level, 27% of offers of admissions to graduate students in Iran were deferred, followed by Saudi Arabia (21%), and India (12%).

Table B.5 Total International Graduate Enrollment by Region/Country of Origin, Fall 2020 Admission Cycle

| | % Shares by Region/Country of Origin | | | % Shares by Degree Objective | |
|---------------------------------------|--------------------------------------|------------------------|----------------|------------------------------|------------|
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 225,975 | 119,811 | 106,164 | 53% | 47% |
| Asia | 72% | 76% | 67% | 56% | 44% |
| <i>China</i> | <i>34%</i> | <i>34%</i> | <i>34%</i> | <i>52%</i> | <i>48%</i> |
| <i>India</i> | <i>21%</i> | <i>29%</i> | <i>13%</i> | <i>71%</i> | <i>29%</i> |
| <i>Japan</i> | <i>1%</i> | <i>1%</i> | <i>1%</i> | <i>52%</i> | <i>48%</i> |
| <i>South Korea</i> | <i>4%</i> | <i>3%</i> | <i>6%</i> | <i>33%</i> | <i>67%</i> |
| <i>Taiwan</i> | <i>2%</i> | <i>2%</i> | <i>2%</i> | <i>48%</i> | <i>52%</i> |
| Europe | 8% | 6% | 10% | 39% | 61% |
| Latin America & Caribbean | 7% | 7% | 7% | 51% | 49% |
| <i>Brazil</i> | <i>1%</i> | <i>1%</i> | <i>2%</i> | <i>43%</i> | <i>57%</i> |
| <i>Mexico</i> | <i>1%</i> | <i>1%</i> | <i>1%</i> | <i>56%</i> | <i>44%</i> |
| Middle East & North Africa | 7% | 4% | 10% | 33% | 67% |
| <i>Iran</i> | <i>2%</i> | <i>1%</i> | <i>4%</i> | <i>15%</i> | <i>85%</i> |
| <i>Saudi Arabia</i> | <i>2%</i> | <i>2%</i> | <i>2%</i> | <i>48%</i> | <i>52%</i> |
| North America (Canada only) | 2% | 3% | 2% | 57% | 43% |
| Oceania | 1% | 1% | 1% | 52% | 48% |
| Sub-Saharan Africa | 4% | 4% | 4% | 54% | 46% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Chinese nationals constituted the largest share (34%) of international graduate students with more than 225,000 graduate students enrolled in Fall 2020 at institutions participating in this survey. In addition, Chinese graduate students make up the largest percentage (34%) of international master's and certificate students.

Fall 2020 International Graduate Admissions Data by Field of Study

Table C.1 Final International Graduate Applications by Field of Study, Fall 2020 Admission Cycle

| Table C.1 Final International Graduate Applications by Field of Study, Fall 2020 Admission Cycle | | | | | |
|---|----------------------------|------------------------|----------------|------------------------------|------------|
| | % Shares by Field of Study | | | % Shares by Degree Objective | |
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 805,711 | 528,101 | 277,610 | 66% | 34% |
| Arts & Humanities | 5% | 3% | 7% | 49% | 51% |
| Biological & Agricultural Sciences | 7% | 3% | 14% | 28% | 72% |
| Business | 13% | 16% | 6% | 85% | 15% |
| Education | 2% | 2% | 2% | 66% | 34% |
| Engineering | 24% | 24% | 24% | 66% | 34% |
| Health Sciences | 3% | 3% | 4% | 58% | 42% |
| Mathematics & Computer Sciences | 28% | 34% | 15% | 81% | 19% |
| Physical & Earth Sciences | 5% | 2% | 11% | 22% | 78% |
| Public Administration & Services | 1% | 1% | 0% | 76% | 24% |
| Social & Behavioral Sciences | 9% | 6% | 14% | 44% | 56% |
| Other Fields | 5% | 6% | 3% | 80% | 20% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

By fields of study, Mathematics & Computer Sciences received the most international graduate applications for master's and certificate programs (34%), while Engineering received the most applications from international students for doctoral programs (24%). The percentage share of Mathematics & Computer Sciences applications among all international applications increased for both types of degrees from the last admission cycle. The share of Engineering applications among all international applications at the master's and certificate level has no change when compared to Fall 2019.

While master's applications were concentrated in three specific fields – Engineering, Mathematics & Computer Sciences, and Business – the pattern for doctoral applications was more distributed. After Engineering, the top four fields of study for international doctoral applicants were Mathematics & Computer Sciences (15%), Social & Behavioral Sciences (14%), Biological & Agricultural Sciences (14%), and Physical & Earth Sciences (11%).

For those applicants whose degree objective levels were reported, the vast majority of applicants in the fields of Business (85%), Mathematics & Computer Sciences (81%), Public Administration & Services (76%), Education (66%), and Engineering (66%) applied for master's and certificate programs. By contrast, applications for basic science fields, such as Physical & Earth Sciences (78%), Biological & Agricultural Sciences (72%), and Social & Behavioral Sciences (56%), were more often for doctoral programs.

Table C.2 Offers of Admission to International Graduate Applicants by Field of Study, Fall 2020 Admission Cycle

| Table C.2 Offers of Admission to International Graduate Applicants by Field of Study, Fall 2020 Admission Cycle | | | | | |
|--|----------------------------|------------------------|---------------|------------------------------|------------|
| | % Shares by Field of Study | | | % Shares by Degree Objective | |
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 264,727 | 220,722 | 44,005 | 83% | 17% |
| Arts & Humanities | 3% | 3% | 7% | 68% | 32% |
| Biological & Agricultural Sciences | 4% | 3% | 9% | 61% | 39% |
| Business | 16% | 18% | 3% | 97% | 3% |
| Education | 2% | 2% | 3% | 78% | 22% |
| Engineering | 26% | 25% | 31% | 80% | 20% |
| Health Sciences | 3% | 3% | 3% | 81% | 19% |
| Mathematics & Computer Sciences | 28% | 30% | 16% | 90% | 10% |
| Physical & Earth Sciences | 4% | 2% | 14% | 47% | 53% |
| Public Administration & Services | 1% | 1% | 1% | 88% | 12% |
| Social & Behavioral Sciences | 7% | 6% | 10% | 76% | 24% |
| Other Fields | 6% | 7% | 3% | 91% | 9% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Table C.3 First-time International Graduate Enrollment by Field of Study, Fall 2020 Admission Cycle

| | % Shares by Field of Study | | | % Shares by Degree Objective | |
|------------------------------------|----------------------------|-----------------------|---------------|------------------------------|-------------|
| | Total | Master's & Certificat | Doctorate s | Master's & Certificat | Doctorate s |
| Total | 51,613 | 37,056 | 14,557 | 72% | 28% |
| Arts & Humanities | 5% | 4% | 8% | 55% | 45% |
| Biological & Agricultural Sciences | 6% | 4% | 11% | 49% | 51% |
| Business | 20% | 26% | 5% | 92% | 8% |
| Education | 4% | 4% | 4% | 75% | 25% |
| Engineering | 20% | 17% | 28% | 59% | 41% |
| Health Sciences | 4% | 5% | 4% | 73% | 27% |
| Mathematics & Computer Sciences | 19% | 21% | 15% | 78% | 22% |
| Physical & Earth Sciences | 4% | 1% | 11% | 26% | 74% |
| Public Administration & Services | 1% | 1% | 1% | 79% | 21% |
| Social & Behavioral Sciences | 9% | 8% | 10% | 66% | 34% |
| Other Fields | 7% | 9% | 4% | 84% | 16% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Not surprisingly, the fields of Business (92%), Other Fields (84%), Public Administration & Services (79%), Mathematics & Computer Sciences (78%), and Education (75%) had high concentrations of first-time international students in master's and certificate programs in Fall 2020. By contrast, doctoral first-time students accounted for 74% of international graduate students in Physical & Earth Sciences and 51% in Biological & Agricultural Sciences. This pattern largely mirrors what was found for all first-time graduate students, including U.S. citizens & permanent residents, in the Fall 2016 version of this report (Okahana, 2017).

While nearly three quarters of first-time master's and certificate students were in the fields of Engineering (17%), Mathematics & Computer Sciences (21%), and Business (26%), doctoral student enrollment was spread across a wider range of disciplines. Engineering (28%) continues to be the field of choice for first-time doctoral enrollment; however, four fields, Mathematics & Computer Sciences (15%), Biological & Agricultural Sciences (11%), Physical & Earth Sciences (11%), and Social & Behavioral Sciences (10%), also have sizeable numbers of first-time doctoral students.

Table C.4 Deferred Admissions and First-time International Graduate Enrollment as Percentage Shares of Offers of Admission by Field of Study, Fall 2020 Admission Cycle

| | Master's & Certificate | | | Doctorates | | |
|------------------------------------|------------------------|------------|------------|----------------------|------------|------------|
| | Offers of Admissions | % Deferred | % Enrolled | Offers of Admissions | % Deferred | % Enrolled |
| Total | 220,722 | 12% | 17% | 44,005 | 10% | 33% |
| Arts & Humanities | 6,178 | 9% | 23% | 2,901 | 8% | 39% |
| Biological & Agricultural Sciences | 6,305 | 10% | 24% | 3,988 | 12% | 40% |
| Business | 39,853 | 9% | 23% | 1,342 | 6% | 56% |
| Education | 4,988 | 6% | 31% | 1,439 | 9% | 36% |
| Engineering | 53,525 | 16% | 11% | 13,247 | 12% | 30% |
| Health Sciences | 6,141 | 10% | 27% | 1,404 | 10% | 43% |
| Mathematics & Computer Sciences | 64,849 | 15% | 11% | 6,873 | 8% | 31% |
| Physical & Earth Sciences | 5,316 | 0% | 10% | 5,901 | 9% | 26% |
| Public Administration & Services | 1,877 | 12% | 21% | 254 | 15% | 41% |
| Social & Behavioral Sciences | 13,825 | 8% | 21% | 4,452 | 5% | 34% |
| Other Fields | 14,399 | 10% | 21% | 1,414 | 10% | 41% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Of the offers of admission made to international graduate students for master's/certificate programs in Fall 2020, 17% of them enrolled for the first-time and 12% deferred their offers. At the doctoral level, in contrast, 33% of them enrolled and 10% of them deferred. For master's/certificate programs, the rates of deferrals were the highest for Engineering (16%) and Mathematics & Computer Sciences (15%). For both fields, only 11% of offers of admission, respectively, turned into first-time enrollments in Fall 2020.

Table C.5 Total International Graduate Enrollment by Field of Study, Fall 2020 Admission Cycle

| Table C.5 Total International Graduate Enrollment by Field of Study, Fall 2020 Admission Cycle | | | | | |
|--|----------------------------|------------------------|----------------|------------------------------|------------|
| | % Shares by Field of Study | | | % Shares by Degree Objective | |
| | Total | Master's & Certificate | Doctorates | Master's & Certificate | Doctorates |
| Total | 225,975 | 119,811 | 106,164 | 53% | 47% |
| Arts & Humanities | 5% | 4% | 7% | 36% | 64% |
| Biological & Agricultural Sciences | 8% | 4% | 12% | 28% | 72% |
| Business | 12% | 19% | 3% | 86% | 14% |
| Education | 3% | 3% | 4% | 52% | 48% |
| Engineering | 27% | 23% | 31% | 45% | 55% |
| Health Sciences | 4% | 5% | 4% | 58% | 42% |
| Mathematics & Computer Sciences | 20% | 26% | 14% | 68% | 32% |
| Physical & Earth Sciences | 6% | 1% | 12% | 11% | 89% |
| Public Administration & Services | 1% | 1% | 1% | 68% | 32% |
| Social & Behavioral Sciences | 8% | 6% | 10% | 41% | 59% |
| Other Fields | 5% | 7% | 3% | 70% | 30% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Note: Not all responding institutions provided valid data for country/region of origin, field of study, or degree objectives.

Engineering fields lead all other fields of study by a substantial margin with respect to total enrollment, consistent with application counts, offers of admission, and first-time enrollment. Approximately three out of ten international graduate students—both master's and certificate students (23%) and doctoral students (31%)—enrolled in an Engineering field.

NOTES AND DEFINITIONS

About the CGS International Graduate Admissions Survey

In 2004, the Council of Graduate Schools (CGS) launched an annual empirical examination of international graduate application, admission, and enrollment trends in response to member institutions' interest in changes in the enrollment of students from abroad seeking master's and doctoral degrees from U.S. colleges and universities. Broadly speaking, the survey is designed to capture information about application counts and offers of admission, as well as first-time and total graduate enrollment of international students for each fall admission cycle. For the purpose of this survey, an international student is defined as a person who was not a citizen, national, or permanent resident of the United States and was in this country on a student visa, or on a temporary basis, and does not have the legal right to remain indefinitely. Undocumented students, individuals with deferred action status, and refugees are not included in this definition of international students.

Beginning in the Fall 2016 admission cycle, the survey was redesigned to collect data by degree objective (master's and graduate certificate vs. doctorate), and for all seven regions of origin, eight countries of origin, and all eleven broad fields of study. Additionally, beginning this survey cycle, the respondent pool was expanded to include institutions that were not CGS members but were members of the Conference of Southern Graduate Schools (CSGS), the Midwestern Association of Graduate Schools (MAGS), the Northeastern Association of Graduate Schools (NAGS), or the Western Association of Graduate Schools (WAGS). These changes were made to make the results more comprehensive, and to make them consistent with the CGS/GRE Survey of Graduate Enrollment & Degrees.

Data Collection

The 2020 CGS International Graduate Admissions Survey was sent to 771 U.S. colleges and universities, which were CGS members as of January 2020 and other institutions which were members of CSGS, MAGS, NAGS, or WAGS. Institutions were asked to report the number of final applications from and offers of admission to prospective international graduate students, as well as first-time and total international graduate enrollment for Fall 2020. The 2020 survey was administered between October 7, 2020 and November 30, 2020. A total of 360 institutions, or 46.7%, responded to the survey. While the response rate is less than in years past, largely due to expanding the survey population this year to include CGS regional affiliates (e.g., CSGS, MAGS, NAGS, and WAGS members), it nevertheless reflects the largest number of institutions responding to this survey since it was launched in 2004. The data collection instrument and survey instructions are available on the project website. Each completed data collection instrument submitted by participating institutions was then exported into four databases: final applications, offers of admission, first-time enrollment, and total enrollment.

Data Analysis Methods

Valid respondents for data analysis

Institutions providing data for the overall total count for international graduate students (i.e., sums of master's and certificate international students and doctoral international students) in the respective section of the survey (i.e., final applications, offers of admission, first-time enrollment, and total enrollment) were included in data analysis. This equated to 351 institutions for the final applications section with the reported total of 805,711 applications, 349 institutions for the offers of admission section with the reported total of 264,727 offers of admission, 326 institutions for the first-time enrollment section with the reported total of 51,613 first-time enrollments, and 330 institutions for the total enrollment section with the reported total of 225,975 total enrollments.

The summary of institutional control, region, and Carnegie Classification of institutions with valid responses for the first-time enrollment in Fall 2020 (N=326) is shown in Table D.1. Overall, two thirds (69%) of

responding institutions were public universities. Over one third (35%) were master's colleges and universities, while the majority (65%) were research universities. Similarly, the summary of institutional control, region, and Carnegie Classification of institutions with valid responses for the first-time enrollment in both Fall 2019 and Fall 2020 (N=280) is shown in Table D.2.

Table D.1 Characteristics of Institutions with Valid Responses for Fall 2020 First-time Enrollment

| | Total | | Institution Control | | | Region | | | |
|--|-------|-----|---------------------|-------------------------|---------------------|---------|-----------|------|-------|
| | | | Public | Private, not-for-profit | Private, for-profit | Midwest | Northeast | West | South |
| All Institutions | 100% | 326 | 69% | 31% | 0% | 18% | 20% | 18% | 43% |
| Doctoral Universities: Very High Research Activity | 32% | 103 | 75% | 25% | 0% | 32% | 13% | 16% | 39% |
| Doctoral Universities: High Research Activity | 23% | 75 | 73% | 27% | 0% | 16% | 25% | 19% | 41% |
| Doctoral/Professional Universities | 10% | 33 | 45% | 55% | 0% | 23% | 24% | 15% | 38% |
| Master's-focused Institutions | 29% | 95 | 69% | 31% | 0% | 26% | 21% | 5% | 47% |
| All Other Institutions | 6% | 20 | 60% | 40% | 0% | 23% | 20% | 16% | 40% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Table D.2 Characteristics of Institutions with Valid Responses for Fall 2019 and Fall 2020 First-time Enrollment

| | Total | | Institution Control | | | Region | | | |
|--|-------|-----|---------------------|-------------------------|---------------------|---------|-----------|------|-------|
| | | | Public | Private, not-for-profit | Private, for-profit | Midwest | Northeast | West | South |
| All Institutions | 100% | 280 | 70% | 30% | 0% | 18% | 21% | 19% | 41% |
| Doctoral Universities: Very High Research Activity | 34% | 94 | 76% | 24% | 0% | 32% | 15% | 15% | 39% |
| Doctoral Universities: High Research Activity | 22% | 62 | 76% | 24% | 0% | 19% | 22% | 19% | 41% |
| Doctoral/Professional Universities | 10% | 27 | 48% | 52% | 0% | 23% | 24% | 18% | 35% |
| Master's-focused Institutions | 28% | 79 | 68% | 32% | 0% | 28% | 17% | 6% | 50% |
| All Other Institutions | 6% | 18 | 67% | 33% | 0% | 23% | 20% | 17% | 40% |

Data Source: Council of Graduate Schools, International Graduate Admissions Survey 2020

Additional data exclusion rules were applied for computations of percentage distributions of international students by regions/countries of origin and by fields of study, as well as by degree levels within specific regions/countries of origin or fields of study.

Percentage distributions of international students by regions/countries of origin

For each section of the survey, percentage distributions of master's degree & certificate students, doctoral students, and all students by regions/countries of origin were reported. The computations were based on the disaggregated data reported in regions/countries of origin sections of the data collection instrument, and only those institutions reporting complete data for the respective section were included in the computation. The sum of all six regions and Canada in this section served as the denominator, or 100%. Only institutions with

the reported total counts in master's & certificates and doctorates columns matched with calculated totals of all six regions and Canada respectively were included in this calculation. Due to missing values, these sums may be smaller than the total counts reported as the totals of valid respondents noted earlier.

Percentage distributions of international students by fields of study

For each section of the survey, percentage distributions of master's degree & certificate students, doctoral students, and all students by fields of study were reported. The computations were based on the disaggregated data reported in the fields of study section of the data collection instrument, and only those institutions reported complete data for the respective section was included in the computation. The sum of all 11 fields of study in this section served as the denominator, or 100%. Only institutions with the reported total counts in master's & certificates and doctorates columns matched with calculated totals of all eleven fields of study respectively were included in this calculation. Due to missing values, these sums may be smaller than the total counts reported as the totals of valid respondents noted earlier.

Percentage distributions of international students by degree-levels within particular regions/ countries of origin

Percentage distributions of international students by degree-levels (i.e., master's and certificate students v. doctoral students) were computed for each region/country of origin. Calculated sums for master's and certificate students and doctoral students to each category (e.g., Asia, India, etc.) served as the denominator, or 100%. Due to missing values, these sums may be smaller than the total counts reported as the totals of valid respondents noted earlier.

Percentage distributions of international students by degree-levels within particular fields of study

Percentage distributions of international students by degree-levels (i.e., master's and certificate students v. doctoral students) were computed for each field of study. Calculated sums for master's and certificate students and doctoral students for each category (e.g., business, engineering, etc.) served as the denominator, or 100%. Due to missing values, these sums may be smaller than the total counts reported as the totals of valid respondents noted earlier.

Changes between Fall 2019 and Fall 2020

Changes between Fall 2019 and Fall 2020 are expressed as percentage differences, and only those institutions reporting valid data for both admission cycles were included in the computation. Fall 2019 data was drawn from the CGS International Graduate Admissions Survey, Fall 2019.

NAGAP/CGS Survey Methodology

The 2020 NAGAP/CGS Survey of Graduate Enrollment Management Professionals was fielded by the Council of Graduate Schools (CGS), in partnership with NAGAP, The Association for Graduate Enrollment Management. The survey asked a series of questions regarding U.S. international and domestic graduate enrollment trends in Fall 2020, outreach efforts, and graduate school pipeline issues, among other topics. The survey was sent out through Qualtrics to a diverse range of professionals who are part of the NAGAP community on November 10 and remained open until January 4, 2021. A total of 217 institutions responded to the survey.

International Graduate Admissions Supplemental Questionnaire Methodology

As a short component of 2020 CGS International Graduate Admissions Survey, the Supplemental Questionnaire asks the overall first-time and continuing U.S. domestic and international enrollment in master's and doctoral programs for Fall 2019 and Fall 2020 as well as enrollment deferral, outreach efforts, and suspension of graduate admissions. The survey was sent out to graduate deans (or equivalent) at 761 CGS member institutions through Qualtrics on October 8, 2020 and remained open until January 8, 2021. A total of 115 membership institutions responded to the survey.

Countries and Regions of Origin

The survey collected data on eight countries of origin, including: Brazil, Canada, China, India, Mexico, Saudi Arabia, Republic of Korea (South Korea), and Taiwan. These eight countries were selected because they represent the top countries of origin for international graduate students in the United States, or for other geopolitical reasons. The survey also collected data from all seven regions of the world: Asia, Europe, Latin America & Caribbean, Middle East & North Africa, North America (for the purpose of this study, North America includes only Canada), Oceania, and Sub-Saharan Africa. Specific definitions are listed below:

Asia

Asia includes: Afghanistan, Bangladesh, Bhutan, Brunei, Burma (Myanmar), Cambodia, China, East Timor, Hong Kong, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Macau, Malaysia, Maldives, Mongolia, Nepal, Pakistan, People's Democratic Republic of Korea (North Korea), Philippines, Republic of Korea (South Korea), Singapore, Sri Lanka, Taiwan, Tajikistan, Thailand, Turkmenistan, Uzbekistan, and Vietnam.

For the purpose of this survey, China refers to the People's Republic of China and excludes Hong Kong, Macau, and Taiwan.

Europe

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 (Holy See).

Latin America & Caribbean

Latin America & Caribbean includes: Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Sint Maarten, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad & Tobago, Turks and Caicos Islands, Uruguay, and Venezuela.

Middle East & North Africa

Middle East & North Africa includes: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestinian Territories, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, and Yemen.

Oceania

Oceania includes: Australia, Cook Islands, Fiji, French Polynesia, Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Wallis & Futuna.

Sub-Saharan Africa

Sub-Saharan Africa includes: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Cote d'Ivoire (Ivory Coast), Democratic Republic of Congo (Kinshasa, Republic of Congo), Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius,

Mozambique, Namibia, Niger, Nigeria, Republic of the Congo (Brazzaville), Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

Carnegie Classification

Institutions were coded according to their 2018 Carnegie Basic Classification. In the analysis of first-time enrollment by Carnegie Classification, the responding institutions were classified as Doctoral Universities: Very High Research Activity, Doctoral Universities: High Research Activity, Doctoral/Professional Universities, Master's Colleges and Universities, and All Other Institutions.

Taxonomy

The survey collected data for all 11 broad fields of study, including: arts & humanities, biological & agricultural sciences, business, education, engineering, health sciences, mathematics & computer sciences, physical & earth sciences, public administration & services, social & behavioral sciences, and other fields. These are the same fields of study as used by the CGS/GRE Survey of Graduate Enrollment & Degrees. The detailed taxonomy is available on the project website.

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List of Institutions Contributing Fall 2020 Data

| | |
|---|--|
| Albert Einstein College of Medicine | Clark Atlanta University |
| Albertus Magnus College | Clemson University |
| Alfred University | Cleveland State University |
| Angelo State University | College of Charleston |
| Antioch University-New England | Colorado School of Mines |
| Appalachian State University | Colorado State University-Fort Collins |
| Arizona State University-Tempe | Columbia College |
| Arkansas Tech University | Columbia College Chicago |
| Auburn University | Columbia University in the City of New York |
| Auburn University at Montgomery | Concordia University-Chicago |
| Augusta University | Cornell University |
| Ball State University | Creighton University |
| Baylor College of Dentistry-Texas A&M Univ HSC | CUNY City College |
| Baylor College of Medicine | Dartmouth College |
| Bemidji State University | Delta State University |
| Benedictine University | Duke University |
| Berry College | East Carolina University |
| Binghamton University | East Stroudsburg University of Pennsylvania |
| Boston University | East Tennessee State University |
| Bradley University | Eastern Illinois University |
| Brenau University | Eastern Kentucky University |
| Brigham Young University-Provo | Eastern Michigan University |
| Bryant University | Eastern Washington University |
| Buffalo State College | Embry-Riddle Aeronautical University-Daytona Beach |
| Caldwell University | Emory University |
| California Institute of Integral Studies | Fitchburg State University |
| California Institute of Technology | Florida Atlantic University |
| California Lutheran University | Florida Institute of Technology |
| California Polytechnic State University-San Luis Obispo | Florida International University |
| California State Polytechnic University-Pomona | Florida State University |
| California State University - San Bernardino | Fordham University |
| California State University-Bakersfield | Gallaudet University |
| California State University-East Bay | Geneva College |
| California State University-Fresno | George Washington University |
| California State University-Fullerton | Georgetown University |
| California State University-Los Angeles | Georgia Institute of Technology-Main Campus |
| California State University-Sacramento | Georgia Southern University |
| California State University-San Marcos | Georgia State University |
| Cameron University | Gonzaga University |
| Carson-Newman University | Governors State University |
| Case Western Reserve University | Grand Valley State University |
| Central Connecticut State University | Hampton University |
| Central Michigan University | Harvard University |
| Chapman University | Hofstra University |
| Chatham University | Howard University |
| Christopher Newport University | Illinois State University |
| Claremont Graduate University | Indiana University of Pennsylvania-Main Campus |

| | |
|--|---|
| Indiana University-Bloomington | North Carolina State University at Raleigh |
| Indiana University-Purdue University-Indianapolis | North Dakota State University-Main Campus |
| Inter American University of Puerto Rico-Metro | Northeastern Illinois University |
| Iona College | Northeastern University |
| Iowa State University | Northern Arizona University |
| Ithaca College | Northern State University |
| John Brown University | Northwestern University |
| John Carroll University | Nova Southeastern University |
| Johns Hopkins University | Oakland City University |
| Kansas State University | Oakland University |
| Kennesaw State University | Ohio State University-Main Campus |
| Kent State University at Kent | Ohio University-Main Campus |
| Kutztown University of Pennsylvania | Oklahoma State University-Main Campus |
| Lamar University | Old Dominion University |
| Lehigh University | Oregon State University |
| Lewis University | Pace University |
| Lincoln Memorial University | Pacific Lutheran University |
| Longwood University | Pennsylvania State University-Main Campus |
| Louisiana State University and Agricultural & Mechanical College | Piedmont College |
| Louisiana State University Health Sciences Center-New Orleans | Pittsburg State University |
| Loyola University Chicago | Portland State University |
| Loyola University Maryland | Prairie View A & M University |
| Madonna University | Princeton University |
| Marquette University | Purdue University-Main Campus |
| Marymount University | Quinnipiac University |
| Massachusetts Institute of Technology | Radford University |
| McNeese State University | Rhode Island School of Design |
| Medical College of Wisconsin | Rice University |
| Mercy College | Rochester Institute of Technology |
| Metropolitan State University of Denver | Rockefeller University |
| Michigan State University | Rose-Hulman Institute of Technology |
| Michigan Technological University | Rutgers University - New Brunswick |
| MidAmerica Nazarene University | Rutgers University-Camden |
| Middle Tennessee State University | Sacred Heart University |
| Mississippi State University | Saint Ambrose University |
| Missouri State University-Springfield | Salem State University |
| Missouri University of Science & Technology | Salisbury University |
| Missouri Western State University | San Jose State University |
| Montana State University | Seattle Pacific University |
| Morgan State University | Seattle University |
| Mount Saint Joseph University | Shenandoah University |
| New Jersey Institute of Technology | Simmons University |
| New Mexico State University-Main Campus | Slippery Rock University of Pennsylvania |
| New York Institute of Technology | South Dakota School of Mines and Technology |
| New York University | South Dakota State University |
| North Carolina A & T State University | Southeast Missouri State University |
| North Carolina Central University | Southeastern Louisiana University |
| | Southern Adventist University |
| | Southern Arkansas University Main Campus |

Southern Illinois University-Carbondale
 Southern Illinois University-Edwardsville
 St Bonaventure University
 St. Mary's University
 Stanford University
 State University of New York at New Paltz
 Stevens Institute of Technology
 Stockton University
 Stony Brook University
 Suffolk University
 SUNY at Fredonia
 SUNY College at Brockport
 SUNY College at Oswego
 SUNY College of Environmental Science and Forestry
 SUNY Polytechnic Institute
 Syracuse University
 Tarleton State University
 Teachers College at Columbia University
 Temple University
 Tennessee Technological University
 Texas A & M International University
 Texas A & M University-College Station
 Texas A & M University-Corpus Christi
 Texas A & M University-Kingsville
 Texas Christian University
 Texas State University
 Texas Woman's University
 The Catholic University of America
 The College of Saint Rose
 The New School
 The University of Alabama
 The University of Tennessee Health Science Center
 The University of Tennessee-Chattanooga
 The University of Tennessee-Knoxville
 The University of Tennessee-Martin
 The University of Texas at Arlington
 The University of Texas at Austin
 The University of Texas at Dallas
 The University of Texas at El Paso
 The University of Texas at San Antonio
 The University of Texas at Tyler
 The University of Texas Health Science Center at Houston
 The University of Texas Health Science Center at San Antonio
 The University of Texas Medical Branch at Galveston
 The University of Texas of the Permian Basin
 Towson University
 Troy University

Tulane University of Louisiana
 University at Buffalo
 University of Akron Main Campus
 University of Alabama in Huntsville
 University of Arizona
 University of Arkansas
 University of Arkansas for Medical Sciences
 University of California - Santa Cruz
 University of California-Berkeley
 University of California-Davis
 University of California-Irvine
 University of California-Los Angeles
 University of California-Merced
 University of California-San Diego
 University of California-San Francisco
 University of Central Florida
 University of Central Missouri
 University of Central Oklahoma
 University of Chicago
 University of Cincinnati
 University of Colorado Colorado Springs
 University of Colorado Denver/Anschutz Medical Campus
 University of Connecticut
 University of Dallas
 University of Delaware
 University of Denver
 University of Florida
 University of Georgia
 University of Hartford
 University of Hawaii at Manoa
 University of Houston
 University of Houston-Clear Lake
 University of Idaho
 University of Illinois at Chicago
 University of Illinois at Springfield
 University of Illinois at Urbana-Champaign
 University of Iowa
 University of Kansas
 University of Kentucky
 University of Louisville
 University of Maine
 University of Maryland-Baltimore County
 University of Maryland-College Park
 University of Massachusetts Medical School Worcester
 University of Massachusetts-Boston
 University of Massachusetts-Dartmouth
 University of Memphis
 University of Miami

University of Michigan-Ann Arbor
 University of Michigan-Flint
 University of Minnesota-Twin Cities
 University of Mississippi
 University of Mississippi Medical Center
 University of Missouri-Columbia
 University of Missouri-Kansas City
 University of Missouri-St Louis
 University of Nebraska at Kearney
 University of Nebraska at Omaha
 University of Nebraska Medical Center
 University of Nevada-Las Vegas
 University of Nevada-Reno
 University of New Hampshire-Main Campus
 University of New Haven
 University of New Mexico-Main Campus
 University of New Orleans
 University of North Alabama
 University of North Carolina at Chapel Hill
 University of North Carolina at Charlotte
 University of North Carolina at Pembroke
 University of North Carolina Wilmington
 University of North Dakota
 University of North Florida
 University of North Texas
 University of Northern Colorado
 University of Northern Iowa
 University of Notre Dame
 University of Oklahoma-Norman Campus
 University of Oregon
 University of Pennsylvania
 University of Pittsburgh-Pittsburgh Campus
 University of San Diego
 University of San Francisco
 University of South Carolina-Columbia
 University of South Dakota
 University of South Florida-Main Campus
 University of Southern Mississippi
 University of St Thomas
 University of Texas Southwestern Medical Center
 University of the Incarnate Word
 University of Toledo
 University of Utah

University of Vermont
 University of Virginia-Main Campus
 University of West Alabama
 University of West Georgia
 University of Wisconsin - Green Bay
 University of Wisconsin-Madison
 University of Wisconsin-River Falls
 University of Wisconsin-Stevens Point
 University of Wyoming
 Ursuline College
 Valdosta State University
 Virginia Commonwealth University
 Virginia Polytechnic Institute and State University
 Wake Forest University
 Washington State University
 Washington University in St Louis
 Watson School of Biological Sciences
 Wayne State University
 West Virginia University
 Western Carolina University
 Western Illinois University
 Western Kentucky University
 Western Michigan University
 Western Washington University
 Wheaton College
 Wichita State University
 William & Mary
 William Paterson University of New Jersey
 Winthrop University
 Worcester Polytechnic Institute
 Wright State University-Main Campus
 Yale University

Note: Not all responding institutions provided valid data for all the sections of the survey (i.e., final applications, offers of admission, first-time enrollment, and total enrollment). This list comprises all institutions that submitted at least one section of the survey. The number of institutions listed above does not necessarily match with the numbers of institutions providing complete and valid data to various sections.

End Note

Author Contributions and Acknowledgments

This report was prepared by Enyu Zhou and Janet Gao, under the direction of Hironao Okahana. EZ played the principal role in data collection, analysis, and preparation of data tables and figures, as well as the drafting of the report narrative. JG played the principal role in data cleaning and preparing the NAGAP/CGS Survey and International Graduate Admissions Supplemental Questionnaire Analysis. HO is the project director for the CGS International Graduate Admissions Survey and also served as the project director for the NAGAP/CGS Survey of Graduate Enrollment Management Professionals.

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