

2016 CGS International Graduate Admissions Survey: Preliminary Applications

May 2016

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.

Data Collection

The 2016 CGS International Graduate Admissions Survey population consisted of 742 U.S. colleges and universities, 468 of which were CGS members as of January 2016 and 274 of which 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), and the Western Association of Graduate Schools (WAGS). Institutions were asked to provide the preliminary number of applications received for Fall 2016 from prospective international graduate students as of February 1, 2016. The 2016 survey was administered between February 8 and March 4, 2016. A total of 345 institutions, or 46%, responded to the survey. The data collection instrument, along with survey instructions is available on the project website (<http://cgsnet.org/international-graduate-admissions-survey>).

Data Analysis Methods

Imputation of missing values

Responding institutions were instructed to enter a "0" (zero) in fields when no applications from prospective international graduate students have been received. If the institution does not offer programs in a certain field of study and/or degree level, they were instructed to enter a "N/A." and when data are not available, they were asked to enter an "X."

If any fields for total international graduate student counts for master's and certificate programs, doctoral programs, or total were left blank and if it was possible to compute missing totals as sums of disaggregated

figures reported in the fields of study portion of the survey and/or as sums of disaggregated figures reported in the regions of origin portion and Canada in the survey, CGS research team imputed missing values. Similarly, if any fields of overall total for international graduate students (i.e., sums of master's and certificate students and doctoral students) were left blank, and if it was possible to compute the missing fields by adding reported values for total international graduate student counts in master's and certificate programs and doctoral programs, the CGS research team imputed missing values.

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 reported complete data for the respective section was included in the computation. The sum of all six regions and Canada in this section 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 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%. 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. Only institutions that reported complete data for this section, and the respective sum of reported master's and certificate count and doctoral counts is equal to the reported total count were included in this calculation. Calculated sums for master's and certificate students and doctoral students for 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. Only institutions that reported complete data for this section, and the respective sum of reported master's and certificate count and doctoral counts is equal to the reported total count were included in this calculation. 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.

Definitions

Countries and Regions of Origin

The survey collected data on ten countries of origin, including: Brazil, Canada, China, India, Iran, Japan, Mexico, Saudi Arabia, Republic of Korea (South Korea), and Taiwan. These 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 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, Taiwan, etc.

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 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 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 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 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 2015 Carnegie basic classification. In the analysis of applications by Carnegie classification, the responding institutions classified as R1: Doctoral Universities (highest research activity), R2: Doctoral Universities (higher research activity), or R3: Doctoral Universities (moderate research activity) were grouped as doctoral institutions. The responding institutions classified as M1: Master's Colleges and Universities (larger programs), M2: Master's Colleges and Universities (medium programs), or M3: Master's Colleges and Universities (smaller programs). Responding institutions classified as specialized or baccalaureate institutions were excluded from analyses due the small number of applications reported by these 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 appears on the page that follows.

SURVEY TAXONOMY

ARTS AND HUMANITIES

Arts – History, Theory, and Criticism

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

Arts – Performance and Studio

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

English Language and Literature

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

Foreign Languages and Literatures

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

History

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

Philosophy

Ethics
Logic
Philosophy
Philosophy, Other

Arts and Humanities, Other

Linguistic, Comparative, and Related Language Studies and Services
Humanities/Humanistic Studies

Liberal Arts and Sciences/Liberal Arts
Arts and Humanities, Other

BIOLOGICAL & AGRICULTURAL SCIENCES

Agriculture, Natural Resources, and Conservation

Agricultural and Domestic Animal Services
Agricultural and Food Products Processing
Agricultural Business and Management
Agricultural Economics
Agricultural Mechanization
Agricultural Production
Agricultural Public Services
Agriculture, General
Agronomy
Animal Sciences
Applied Horticulture
Fishing and Fisheries Sciences and Management
Food Science and Technology
Forestry
Horticultural Business Services
International Agriculture
Natural Resources and Conservation
Natural Resources Management and Policy
Parks, Recreation, and Leisure Facilities Management
Parks, Recreation, and Leisure Studies
Plant Sciences
Soil Sciences
Wildlife and Wildlands Science and Management
Agriculture, Natural Resources, and Conservation, Other

Biological and Biomedical Sciences

Anatomical Sciences
Animal Biology
Bacteriology
Biochemistry
Bioinformatics
Biology, General
Biomathematics
Biometry
Biophysics
Biotechnology
Botany/Plant Biology
Cell/Cellular Biology
Computational Biology
Developmental Biology
Ecology
Entomology
Epidemiology
Evolution
Genetics

Immunology
Microbiological Sciences
Molecular Biology
Molecular Medicine
Neurosciences
Parasitology
Pathology
Pharmacology
Physiology
Population Biology
Systematics
Toxicology
Zoology
Biological and Biomedical Sciences, Other

BUSINESS

Accounting

Accounting
Auditing
Taxation

Banking and Finance

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

Business Administration and Management

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

Business, Other

Business Statistics
Business/Corporate Communications
Business/Managerial Economics
Insurance
International Business
Management Information Systems
Management Science
Marketing
Marketing Management
Merchandising
Real Estate

Sales
Business Fields, Other

EDUCATION

Education Administration

Educational Administration
Educational Leadership
Educational Supervision

Curriculum and Instruction

Curriculum and Instruction

Early Childhood Education

Early Childhood Education and Teaching
Kindergarten/Preschool Education and Teaching

Elementary Education

Elementary Education and Teaching
Elementary-Level Teaching Fields

Educational Assessment, Evaluation and Research

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

Higher Education

Higher Education
Higher Education Administration

Secondary Education

Secondary Education and Teaching
Secondary-Level Teaching Fields

Special Education

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

Student Counseling and Personnel Services

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

Education, Other

Adult and Continuing Education
Bilingual, Multilingual, and Multicultural Education
Education, General
Educational/Instructional Media Design
Health and Physical Education
International and Comparative Education
Junior High/Middle School Education and Teaching
Outdoor Education
Social and Philosophical Foundations of Education
Teaching English as a Second or Foreign Language
Other Education Fields

ENGINEERING

Chemical Engineering

Chemical and Biomolecular Engineering
Chemical Engineering

Civil Engineering

Architectural Engineering
Civil Engineering
Construction Engineering
Environmental/Environmental Health Engineering
Geotechnical and Geoenvironmental Engineering

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

HEALTH SCIENCES

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

MATHEMATICS & COMPUTER SCIENCES

Mathematical Sciences

Actuarial Science
Applied Mathematics
Mathematics
Probability
Statistics
Mathematical Sciences, Other

Computer and Information Sciences

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

PHYSICAL & 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

**Earth, Atmospheric & Marine
Sciences**

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

Physics & Astronomy

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

Physical Sciences, Other

Physical Sciences, General
Science Technologies
Physical Sciences, Other

**PUBLIC ADMINISTRATION &
SERVICES**

Public Administration

Community Organization and
Advocacy
Public Administration

Social Work

Social Work
Youth Services/Administration
Social Work, Other

**SOCIAL & BEHAVIORAL
SCIENCES**

Anthropology and Archaeology

Anthropology
Archaeology

Economics

Applied Economics
Econometrics
Economics
International Economics

Political Science

International Relations
Political Science and
Government
Public Policy Analysis

Psychology

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

Sociology

Demography
Rural Sociology
Sociology

Social Sciences, Other

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

OTHER FIELDS

Architecture and Environmental

Design

Architectural History and
Criticism
Architectural Sciences and
Technology
Architecture

City/Urban, Community and
Regional Planning
Environmental Design
Interior Architecture
Landscape Architecture
Real Estate Development
Architecture and Environmental
Design, Other

Communications and Journalism

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

Family and Consumer Sciences

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

Library and Archival Studies

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

Religion and Theology

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

Other Fields

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

CIP CROSSWALK

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
Biological & Agricultural Sciences	01, 03, 26 (except 26.1302 and 26.1304), 31.01, 31.03, 31.99, 41.01.
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
Health Sciences	30.19, 31.0505, 51 (except 51.0913, 51.2004, and 51.2309)
Mathematics & Computer Sciences	11, 27, 52.1304
Physical & Earth Sciences	26.1302, 26.1304, 30.18, 40 (except 40.10), 41 (except 41.01), 51.2004
Public Administration & Services	44.00, 44.02, 44.04, 44.07, 44.49
Social & Behavioral Sciences	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, 48, 49, and all other fields not classified above

CGS International Graduate Admissions Survey: Preliminary Applications

Institution Name:	Individual Completing Survey:	
Institution ID:	Phone Number:	E-mail:

	MASTER'S & CERTIFICATE	DOCTORATE	TOTAL
Preliminary Applications should be recorded as of February 1, 2016	Preliminary Applications Fall 2016	Preliminary Applications Fall 2016	Preliminary Applications Fall 2016
Non-U.S. Citizens (Temporary Residents)			
U.S. Citizens & Permanent Residents			
Citizenship Unknown			

Regions/Selected Countries of Origin			
NON-U.S. CITIZENS ONLY	Asia TOTAL		
	China		
	India		
	Japan		
	South Korea		
	Taiwan		
	Europe TOTAL		
	Latin America & Caribbean TOTAL		
	Brazil		
	Mexico		
	Middle East & North Africa TOTAL		
	Iran		
	Saudi Arabia		
	North America (Canada Only)		
	Oceania TOTAL		
	Sub-Saharan Africa TOTAL		

Field of Study			
NON-U.S. CITIZENS ONLY	Arts & Humanities		
	Biological & Agricultural Sciences		
	Business		
	Education		
	Engineering		
	Health Sciences		
	Mathematics & Computer Sciences		
	Physical & Earth Sciences		
	Public Administration & Services		
	Social & Behavioral Sciences		
	Other Fields		