ASEE 2022 Edition

Engineering
& Engineering Technology
BY THE NUMBERS

ASEE
AMERICAN SOCIETY FOR
ENGINEERING EDUCATION

ASEE AMERICAN SOCIETY FOR ENGINEERING EDUCATION

Founded in 1893, the American Society for Engineering Education (ASEE) is a global society of individual, institutional, and corporate members. ASEE's vision is excellent and broadly accessible education empowering students and engineering professionals to create a better world. We work toward achieving that vision by advancing innovation, excellence, and access at all levels of education for the engineering profession. We engage with engineering faculty, business leaders, college and high school students, parents, and teachers to enhance the engineering workforce of the nation. We are the only professional society addressing opportunities and challenges spanning all engineering disciplines, working across the breadth of academic education including teaching, research, and public service.

- We support education at the institutional level by linking faculty and staff across disciplines to create enhanced student learning and discovery.
- We support education across institutions by identifying opportunities to share proven and promising practices.
- We support education locally, regionally, and nationally by forging and reinforcing connections between academia, business, industry, and government.
- We support discovery and scholarship among education researchers by providing opportunities to share and build upon findings.
- We support innovation by fostering the translation of research into improved practices.
- We support disciplinary technical researchers by disseminating best research management practices.

www.asee.org

Profiles of Engineering and Engineering Technology, 2022

ASEE Profiles Survey Team
Joseph Roy, Ph.D. Director, Institutional Research & Analytics
Angela Erdiaw-Kwasie, Data Scientist

December 19, 2023

There was a mistake in the faculty data that was corrected.

March 13, 2024

The research expenditures was updated and corrected.

Engineering & Engineering Technology in 2022[1]

Introduction

The American Society for Engineering Education (ASEE) has collected data from engineering, computing, and engineering technology programs in its annual Profiles of Engineering and Engineering Technology (Profiles) since 2001. The data collected reflects detailed demographic headcounts for program enrollment, department tenured/tenure-track faculty, and degrees awarded.

Technical Definitions and Method

Profiles of Engineering and Engineering Technology is produced annually in collaboration with institutions with at least one ABET-accredited program in engineering, engineering technology, or computer disciplines.

Race/ethnicity: ASEE collects enrollment, degrees awarded, and tenure-track faculty numbers by the U.S. Department of Education's Integrated Post-Secondary Education Data System (IPEDS) reporting categories for race/ethnicity.

Underrepresented minority: ASEE uses the definition from prior editions of NSF's *Science and Engineering Indicators* report (https://ncses.nsf.gov/pubs/nsb20201/glossary): "*this category comprises three racial or ethnic minority groups (blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives) whose representation in S&E education or occupations is smaller than their representation in the U.S. population.*"

Reporting Periods (Profiles 2022):

Fall 2022: institution enrollments, engineering college enrollments, engineering technology college enrollments, faculty head counts, admission requirements and recommendations, and personnel information. Degrees awarded between July 1, 2020 and June 30, 2022. Research expenditures are based on the most recently completed fiscal year ending in 2022.

Research Expenditures: Institutions report all expenditures associated with grants and contracts specifically budgeted for externally sponsored research and associated programs and expenditures associated with all gifts auditably used for research. Institutions are instructed to include expended funds provided by the following external sources:

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1. Federal government
2. State government
3. Foreign government
4. Industry
5. Non-profit organizations (e.g., foundations)
6. Individuals
7. Local government

Gender: Institutions can report under IPEDS rules for gender or under an expanded set of options:

- Male/female (IPEDS)
- Male/female/non-binary gender/another gender or unknown (expanded gender)

If an institution chooses the binary gender option spreadsheet, it is reporting data to ASEE as it would be reported to the IPEDS survey. Gender for individuals (student or faculty) that is unknown would be reported in a category (male or female) selected by the institution. Under this option, institutions are instructed to include counts for **all individuals** in the required cells.

Full-time staff: As defined by the institution. The type of appointment at the snapshot determines whether an employee is full-time or part-time. The employee's term of contract is not considered in making the determination of full- or part-time.

Full-time student: Undergraduate: A student enrolled for 12 or more semester credits or 12 or more quarter credits or 24 or more clock hours a week each term

Graduate: A student enrolled for 9 or more semester credits or 9 or a student involved in thesis or dissertation preparation that is considered full-time by the institution.

Non-tenure track, teaching faculty: Persons identified by the institution as such as typically those whose initial assignments are made for the purpose of conducting instructions as a principle activity (or activities). They may hold academic rank titles of professor, associate professor, assistant professor, instructor, lecturer, or the equivalent of any of those academic ranks. Graduate instruction (teaching) and research assistants are not included in this category.

Part-time student: Undergraduate: A student enrolled for either less than 12 semester or quarter hours or less that 24 clock hours a week each term.

Graduate: A student enrolled for less than 9 semester or quarter credits.

Research personnel: An occupational category used to classify persons whose specific assignments customarily are made for the purpose of conducting research. Regardless of title, academic rank, these employees formally spend the majority of their time conducting research (exclude tenure/tenure-track faculty from this count).

Tuition: The amount of money charged to students for instructional services. Tuition may be charged per term, per course, or per credit

Tuition and fees (published charges): The amount of tuition and required fees covering a full academic year most frequently charged to students. These values represent what a typical student would be charged and may not be the same for all students at an institution. If tuition is charged on a per-credit-hour basis, the average full-time credit hour load for an entire academic year is used to estimate average tuition. Required fees include the fixed sum charged that are required of such a large proportion of all students that the student who does not pay the charges is an exception.

Profiles Data Collection and Reporting in 2022–23

The annual deadline for the Profiles survey submission has been January 31 since 2017, and in past years ASEE received 20 to 30 requests for extensions. Since the start of the pandemic in 2020, however, the ASEE has received over 140 requests annually for extensions and worked with institutions to accept data after the deadline. The data reported in the *Profiles of Engineering & Engineering Technology* publication reflect institutional submissions to ASEE as of August 31, 2023. Institutions submitted corrections or updates after the regular cycle for 2022. Any further corrections will not be reflected in this publication, but in the Engineering Data Management System.

Degrees awarded represent the data reported by the following 223 participating institutions:

Air Force Institute of Technology
Alfred University-NY State College of Ceramics
Arizona State University

Auburn University
Baylor University
Boise State University

Boston University
Brigham Young University
Brigham Young University - Idaho
Brown University
Bucknell University
California Polytechnic State University-San Luis Obispo
California State Polytechnic University-Pomona
California State University-Long Beach
California State University-Northridge
California State University-Sacramento
Campbell University
Carnegie Mellon University
Case Western Reserve University
Central Michigan University
City College of the City University of New York
Clemson University
Colorado State University
Columbia University
Concordia University-Montreal
Cornell University
Dartmouth College
Drexel University
Duke University
East Carolina University
Eastern Michigan University
Embry Riddle Aeronautical University-Daytona Beach
Embry Riddle Aeronautical University-Prescott
FAMU-FSU College of Engineering
Florida Institute of Technology
Florida International University
George Mason University
Georgia Institute of Technology
Gonzaga University
Grand Valley State University
Harvard University
Harvey Mudd College
Hofstra University
Howard University
Indiana University-Purdue University Indianapolis
Iowa State University
Kansas State University
Kennesaw State University
Lafayette College
Lehigh University
Louisiana State University
Louisiana Tech University
Loyola Marymount University
Loyola University Chicago
Massachusetts Institute of Technology
McMaster University
Miami University
Michigan State University
Milwaukee School of Engineering

Mississippi State University
Missouri University of Science and Technology
New Jersey Institute of Technology
New Mexico State University
North Carolina A&T State University
North Carolina State University
North Dakota State University
Northeastern University
Northwestern University
NYU Tandon School of Engineering
Oakland University
Ohio Northern University
Oklahoma State University
Old Dominion University
Olin College of Engineering
Oregon Institute of Technology
Oregon State University
Portland State University
Princeton University
Purdue University
Purdue University Polytechnic Institute
Rensselaer Polytechnic Institute
Rose-Hulman Institute of Technology
Rowan University
Rutgers-The State University of New Jersey-School of Engineering
Saint Louis University
San Diego State University
San Jose State University
Santa Clara University
Seattle University
Smith College
Southern Illinois University Carbondale
Southern Illinois University Edwardsville
Stevens Institute of Technology
Stony Brook University
SUNY Polytechnic Institute
Swarthmore College
Syracuse University
Temple University
Tennessee Technological University
Texas A&M University
Texas Tech University
The Catholic University of America
The Citadel
The College of New Jersey
The George Washington University
The Johns Hopkins University
The Ohio State University
The Pennsylvania State University
The State University of New York at Binghamton
The University of Iowa
The University of Memphis
The University of New Mexico
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 Tulsa
The University of Western Ontario
Tufts University
U.S. Coast Guard Academy
Union College
Union University
United States Military Academy
University at Buffalo-SUNY
University of Alabama at Birmingham
University of Alaska Anchorage-College of Engineering
University of Alaska Fairbanks-College of Engineering and Mines
University of Arizona
University of Arkansas
University of Arkansas at Little Rock
University of British Columbia
University of Calgary
University of California-Berkeley
University of California-Davis
University of California-Irvine
University of California-Los Angeles
University of California-Merced
University of California-Riverside
University of California-San Diego
University of California-Santa Barbara
University of California-Santa Cruz
University of Central Florida
University of Colorado Boulder
University of Colorado Denver
University of Connecticut
University of Dayton
University of Delaware
University of Detroit Mercy
University of Florida
University of Georgia
University of Hawaii at Manoa
University of Houston
University of Idaho
University of Illinois at Chicago
University of Illinois at Urbana-Champaign
University of Kansas
University of Kentucky
University of Louisiana at Lafayette
University of Louisville
University of Maine
University of Maryland-Baltimore County
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University of Massachusetts Amherst
University of Massachusetts Lowell
University of Michigan
University of Michigan-Dearborn
University of Minnesota -Twin Cities
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University of Nevada-Las Vegas
University of Nevada-Reno
University of New Hampshire
University of North Carolina at Charlotte
University of North Texas
University of Notre Dame
University of Oklahoma-Gallogly College of Engineering
University of Pennsylvania
University of Pittsburgh
University of Puerto Rico-Mayaguez Campus
University of Rhode Island
University of Rochester
University of San Diego
University of South Alabama
University of South Carolina
University of South Florida
University of Southern California
University of Tennessee-Knoxville
University of Texas of the Permian Basin
University of the District of Columbia
University of the Pacific
University of Utah
University of Vermont
University of Virginia
University of Waterloo
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
Utah State University
Valparaiso University
Vanderbilt University
Villanova University
Virginia Commonwealth University
Virginia Polytechnic Institute and State University
Washington State University
Washington University in St. Louis
Wayne State University
West Virginia University
Western Michigan University
Wichita State University
William Marsh Rice University
Worcester Polytechnic Institute
Wright State University

Institutions that did not participate but reported at least one degree awarded in 2020-21 to the Integrated Postsecondary Education Data System (IPEDS) were reported using data for the same period reported to the federal government. Included in this were institutions that had at least one ABET accredited program at their institution. All engineering, engineering technology and computer science degrees awarded were integrated into this data. Computer Science degrees awarded at non-participating institutions were uniformly categorized as "Computer Science (outside engineering)". The following institutions did not participate in the 2022 data collection for Profiles and their data were imported from IPEDS for 2022 degrees awarded:

Alabama A & M University	Hampton University
Anderson University	Harding University
Andrews University	Hope College
Arkansas Tech University	Idaho State University
Baker College	Illinois Institute of Technology
Bates College	Indiana Institute of Technology
Benedictine College	Jackson State University
Bethune-Cookman University	James Madison University
Bob Jones University	Lake Superior State University
California Baptist University	Lamar University
California State University-Bakersfield	Lawrence Technological University
California State University-Chico	LeTourneau University
California State University-East Bay	Liberty University
California State University-Fresno	Lipscomb University
California State University-Northridge	Loras College
California State University-San Bernardino	Loyola University Maryland
Capitol Technology University	Maine Maritime Academy
Carroll College	Manhattan College
Central Connecticut State University	Marietta College
Christian Brothers University	Marshall University
Christopher Newport University	Massachusetts Maritime Academy
College of Staten Island CUNY	McNeese State University
CUNY City College	Merrimack College
Eastern Illinois University	Michigan Technological University
Eastern Washington University	Middle Tennessee State University
Elizabethtown College	Midwestern State University
Fairfield University	Minnesota State University-Mankato
Fairleigh Dickinson University-Metropolitan Campus	Mississippi College
Ferris State University	Monmouth University
Florida Agricultural and Mechanical University	Montana Technological University
Florida Atlantic University	Mount Vernon Nazarene University
Florida Gulf Coast University	Murray State University
Florida International University	Muskingum University
Florida Polytechnic University	Navajo Technical University
Fort Lewis College	New Mexico Institute of Mining and Technology
Francis Marion University	Norfolk State University
Frostburg State University	North Carolina State University at Raleigh
Gannon University	Northern Arizona University
Geneva College	Northern Illinois University
Georgia Institute of Technology-Main Campus	Northwest Nazarene University
Georgia Southern University	Norwich University

Oklahoma Christian University
Olivet Nazarene University
Oral Roberts University
Pace University
Prairie View A & M University
Purdue University Fort Wayne
Purdue University Northwest
Purdue University-Main Campus
Quinnipiac University
Rice University
Robert Morris University
Rochester Institute of Technology
Roger Williams University
Saginaw Valley State University
Saint Ambrose University
Saint Francis University
Saint Martin's University
San Francisco State University
Seattle Pacific University
South Dakota School of Mines and Technology
Southeast Missouri State University
Southern Arkansas University Main Campus
Southern Methodist University
Southern New Hampshire University
Southern University and A & M College
Southern Utah University
State University of New York at New Paltz
Stephen F Austin State University
SUNY Buffalo State
SUNY College of Environmental Science and Forestry
SUNY Maritime College
Sweet Briar College
Tarleton State University
Tennessee State University
Texas A & M University-Commerce
Texas A & M University-Corpus Christi
Texas A & M University-Kingsville
Texas A&M University-Texarkana
Texas Christian University
Texas State University
The University of Tennessee-Chattanooga
The University of Tennessee-Martin
The University of Texas at Tyler
The University of Texas Rio Grande Valley
The University of West Florida
Thomas Jefferson University
Trine University
Trinity College
Trinity University
Tuskegee University

Union University
United States Merchant Marine Academy
University of Alaska Anchorage
University of Bridgeport
University of Central Oklahoma
University of Cincinnati-Main Campus
University of Denver
University of Evansville
University of Hartford
University of Maryland Eastern Shore
University of Massachusetts-Boston
University of Massachusetts-Dartmouth
University of Michigan-Flint
University of Minnesota-Duluth
University of Missouri-St Louis
University of Mount Union
University of New Haven
University of New Orleans
University of North Carolina at Asheville
University of North Carolina at Chapel Hill
University of North Dakota
University of Oklahoma-Norman Campus
University of Portland
University of Scranton
University of South Carolina-Columbia
University of South Dakota
University of Southern Indiana
University of Southern Maine
University of Southern Mississippi
University of Washington-Tacoma Campus
University of Wisconsin-Platteville
University of Wisconsin-Stevens Point
University of Wisconsin-Stout
Utah Valley University
Vaughn College of Aeronautics and Technology
Virginia Military Institute
Walla Walla University
Webb Institute
Weber State University
West Texas A & M University
West Virginia University Institute of Technology
Western Carolina University
Western Illinois University
Western Kentucky University
Western Washington University
Wilkes University
Winona State University
York College of Pennsylvania
Youngstown State University

American Society for Engineering Education

The American Society for Engineering Education is a non-profit association of more than 10,000 engineering faculty members, U.S. and Canadian colleges of engineering and engineering technology, corporations, and other organizations dedicated to promoting excellence in engineering and engineering technology education. ASEE, which celebrated its centennial in 1993, plays a key role in developing and promoting policies that will enable engineering education to work with allied branches of science and technology to meet the new challenges of global competition and changing demographics.

Mission Statement

ASEE advances innovation, excellence, and access at all levels of education for the engineering profession.

Vision Statement

Excellent and broadly accessible education empowering students and engineering professionals to create a better world.

Values

Excellence, engagement, innovation, integrity, diversity and inclusion.

Goals

ASEE recognizes the term "engineering education" to encompass the full academic spectrum of instruction, research, scholarship, practice, and service. ASEE also has an enduring commitment to continuous improvement.

In the context of the above two statements, ASEE pursues the following goals:

Innovation - ASEE will advance the development of innovative approaches and solutions to engineering education.

Excellence - ASEE will advance excellence in all aspects of engineering education while continuously improving the member experience.

Access - ASEE will advocate for equal access to engineering educational opportunities for all.

Advocacy and Public Policy - ASEE will be the leading advocate for advancing the broad interests of engineering education.

Communities - ASEE will cultivate an inclusive community that engages all members and values the contributions of all stakeholders.

Communication - ASEE will implement a robust and transparent communication strategy effectively linking all stakeholders.

Diversity and Inclusion - ASEE will promote diversity, broadly defined, by modeling equity and inclusion through its policies and practices.

Internal Organization - ASEE will be a strategic and dynamic organization, with a knowledgeable and responsive staff, that enhances stakeholder engagement.

Financial Stability

ASEE must carefully balance opportunities for investments in activities and programs to meet future needs with our current responsibilities, developing and maintaining a robust cash reserve, and ensuring that expenditures align with the organization's mission.

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Engineering & Engineering Technology by the Numbers, 2022

Contents

1 ENGINEERING BACHELOR'S

1.1 ENGINEERING BACHELOR'S DEGREES

1.1.1 Total Bachelor's Degrees Awarded by Engineering Discipline

Table 1: Bachelor's Degrees by Discipline: 141,826*

Discipline Name	Degrees Awarded
Mechanical	32,891
Computer Sci. (inside Eng.)	24,192
Computer Sci. (outside Engr.)	19,006
Electrical	13,331
Civil	12,678
Chemical	8,946
Computer	8,217
Biomedical	7,969
Other	7,132
Industrial/Manufacturing/Systems	6,465
Aerospace	5,364
Electrical/Computer	3,318
Engineering (General)	2,088
Metallurgical and Matrls.	1,800
Civil/Environmental	1,627
Envr. Eng	1,400
Biological and Agricultural	1,361
Petroleum	724
Architectural	682
Engr. Science and Engr. Physics	638
Engineering Management	458
Nuclear	381
Mining	164

* Total does not include computer science (outside engineering).

Bachelor's Degrees Awarded by Engineering Discipline
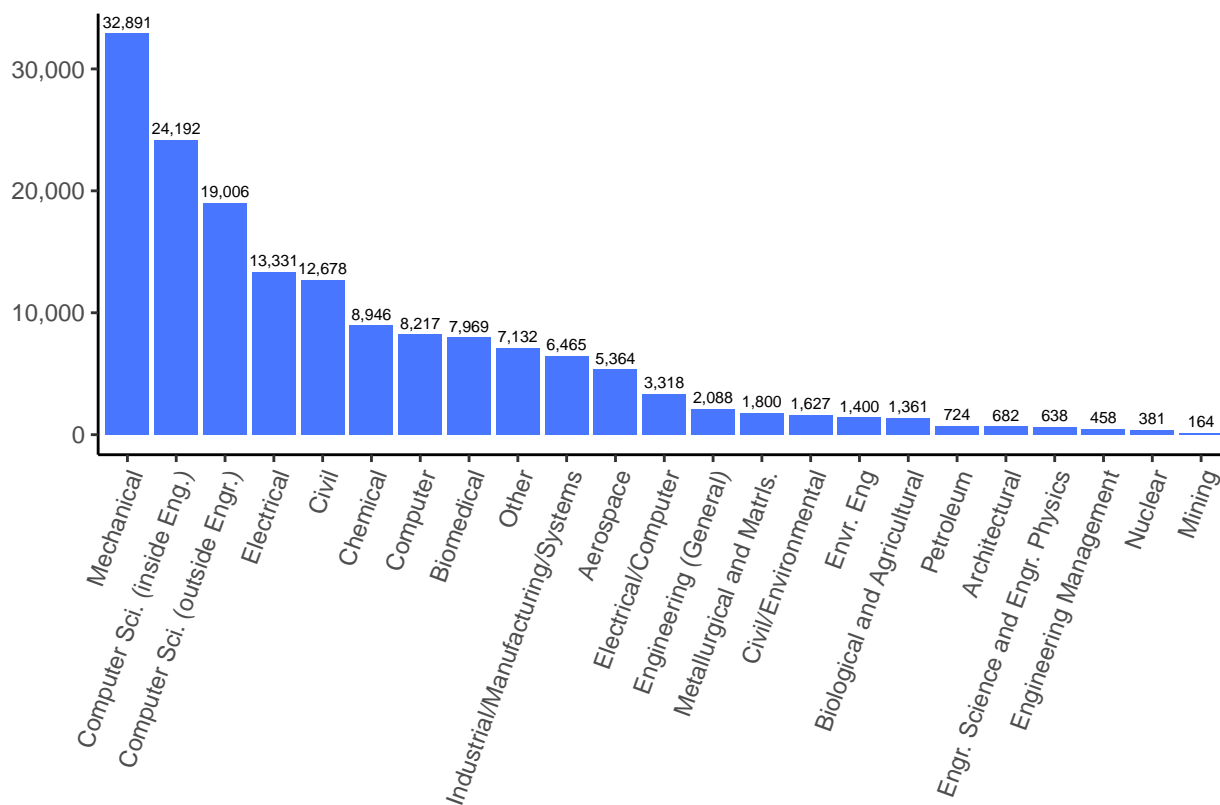
1.1.2 Total Bachelor's Degrees Awarded to Underrepresented Minorities by Engineering Discipline

Table 2: Bachelor's Degrees Awarded to Underrepresented Minorities by Engineering Discipline: 24,725

Discipline Name	Degrees Awarded
Mechanical	5,710
Computer Sci. (inside Eng.)	3,869
Civil	2,875
Electrical	2,620
Computer Sci. (outside Engr.)	2,526
Computer	1,500
Chemical	1,441
Industrial/Manufacturing/Systems	1,258
Biomedical	1,227
Other	1,162
Aerospace	886
Electrical/Computer	474
Engineering (General)	306
Civil/Environmental	282
Envr. Eng	276
Metallurgical and Matrls.	216
Biological and Agricultural	171
Petroleum	141
Architectural	115
Engr. Science and Engr. Physics	71
Engineering Management	58
Nuclear	57
Mining	10

1.1.3 Percentage of Bachelor's Degrees Awarded to Underrepresented Minorities by Discipline

Table 3: Percentage of Bachelor's Degrees Awarded to Underrepresented Minorities by Discipline 16.8 % of Total

Discipline Name	Degrees Awarded
Civil	22.7%
Electrical	19.7%
Envr. Eng	19.7%
Industrial/Manufacturing/Systems	19.5%
Petroleum	19.5%
Computer	18.3%
Mechanical	17.4%
Civil/Environmental	17.3%
Architectural	16.9%
Aerospace	16.5%
Other	16.3%
Chemical	16.1%
Computer Sci. (inside Eng.)	16%
Biomedical	15.4%
Nuclear	15%
Engineering (General)	14.7%
Electrical/Computer	14.3%
Computer Sci. (outside Engr.)	13.3%
Engineering Management	12.7%
Biological and Agricultural	12.6%
Metallurgical and Matrls.	12%
Engr. Science and Engr. Physics	11.1%
Mining	6.1%

1.1.4 Percentage of Bachelor's Degrees Awarded to Women by Discipline

Table 4: Percentage of Bachelor's Degrees Awarded to Women by Discipline 24.1 % of Total

Discipline Name	Percent Women
Biomedical	52.5%
Envr. Eng	48.9%
Biological and Agricultural	40.1%
Chemical	39.9%
Architectural	36.5%
Civil/Environmental	35.6%
Industrial/Manufacturing/Systems	34.5%
Metallurgical and Matrls.	33.2%
Engineering (General)	29%
Engineering Management	27.3%

Table 4: Percentage of Bachelor's Degrees Awarded to Women by Discipline 24.1 % of Total *(continued)*

Discipline Name	Percent Women
Civil	27.1%
Other	26.2%
Engr. Science and Engr. Physics	21.8%
Nuclear	21.5%
Computer Sci. (outside Engr.)	20.9%
Computer Sci. (inside Eng.)	20.6%
Electrical/Computer	20.4%
Aerospace	17.9%
Mechanical	17.6%
Computer	15.7%
Electrical	15.7%
Petroleum	15.5%
Mining	14.6%

Percentage of Bachelor's Degrees Awarded to Women by Discipline
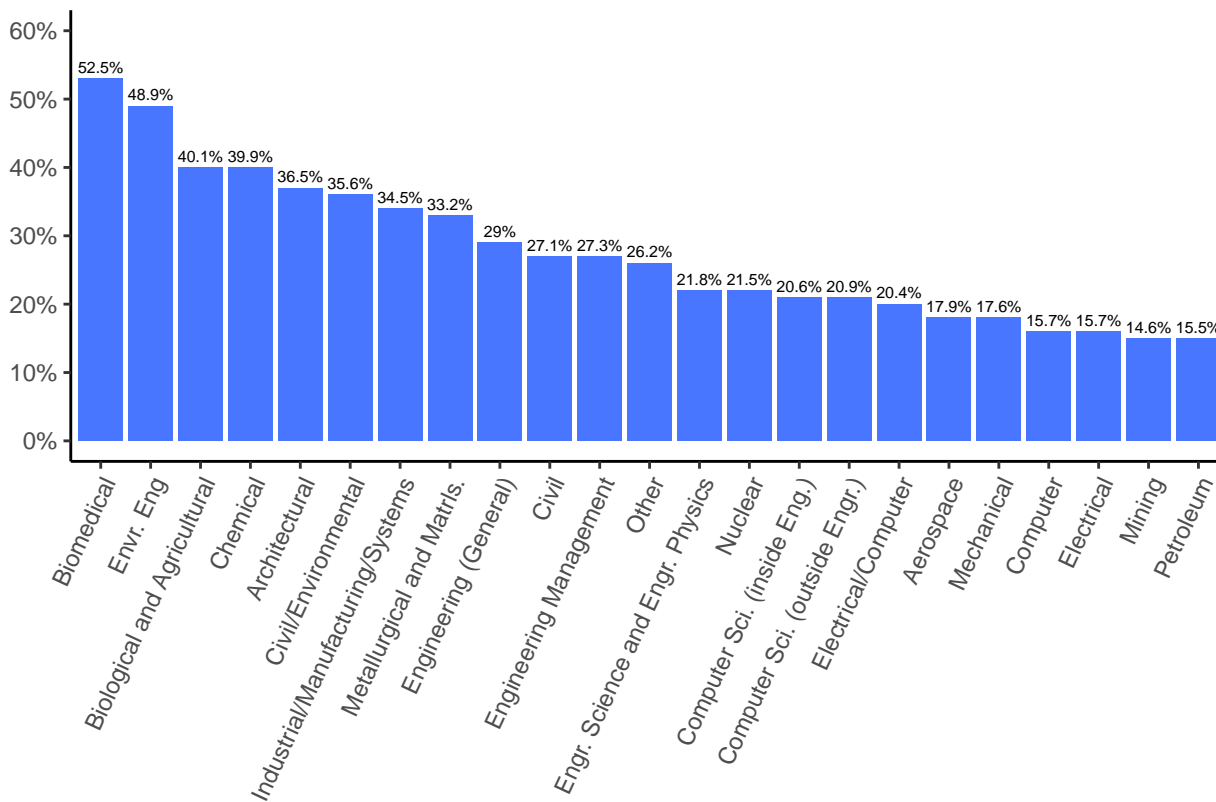
1.1.5 Institutions Awarding the Highest Number of Engineering Bachelor's Degrees

Table 5: Institutions Awarding the Highest Number of Engineering Bachelor's Degrees

No	Institutions	Degrees Awarded
1	Georgia Institute of Technology	2,890
2	Purdue University	2,674
3	Texas A&M University	2,647
4	University of Illinois at Urbana-Champaign	2,404
5	Arizona State University	2,387
6	University of Michigan	2,326
7	University of Central Florida	2,094
8	University of California, Irvine	2,085
9	Virginia Polytechnic Institute and State University	1,906
10	University of Maryland, College Park	1,886
11	The Pennsylvania State University	1,885
12	University of California, Berkeley	1,840
13	The Ohio State University	1,828
14	Oregon State University	1,806
15	Iowa State University	1,770
16	University of Wisconsin-Madison	1,731
17	The University of Texas at Austin	1,730
18	University of Florida	1,656
19	North Carolina State University	1,655
20	University of California, San Diego	1,608
21	Florida International University	1,518
22	Northeastern University	1,442
23	Rutgers, The State University of New Jersey, School of Engineering	1,440
24	The University of Texas at Dallas	1,342
25	California Polytechnic State University, San Luis Obispo	1,296
26	New Jersey Institute of Technology	1,285
27	George Mason University	1,253
28	University of Colorado Boulder	1,245
29	Stony Brook University	1,172

No	Institutions	Degrees Awarded
30	University of Minnesota -Twin Cities	1,165
31	California State Polytechnic University, Pomona	1,158
32	University at Buffalo, SUNY	1,124
33	Clemson University	1,117
34	Auburn University	1,088
35	University of California, Los Angeles	1,081
36	University of North Carolina at Charlotte	1,079
37	Rensselaer Polytechnic Institute	1,076
38	California State University, Long Beach	1,073
39	Louisiana State University	1,042
40	Missouri University of Science and Technology	1,003
41	Colorado School of Mines	977
42	University of Virginia	969
43	Mississippi State University	962
44	University of Illinois at Chicago	961
45	University of South Florida	960
45	Worcester Polytechnic Institute	960
47	University of California-Santa Cruz	936
48	University of Massachusetts Amherst	926
49	Michigan State University	917
50	University of Houston	889

* 418 Institutions included

1.1.6 Bachelor's Degrees Awarded by Gender

Table 6: Bachelor's Degrees Awarded by Gender

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Female	17.80%	18.10%	18.40%	18.90%	19.10%	19.90%	20.90%	21.30%	21.90%	22.40%	23.00%	24.00%	24.20%
Male	82.20%	81.90%	81.60%	81.10%	80.90%	80.10%	79.10%	78.70%	78.10%	77.60%	77.00%	76.00%	75.80%

Bachelor's Degrees Awarded by Gender
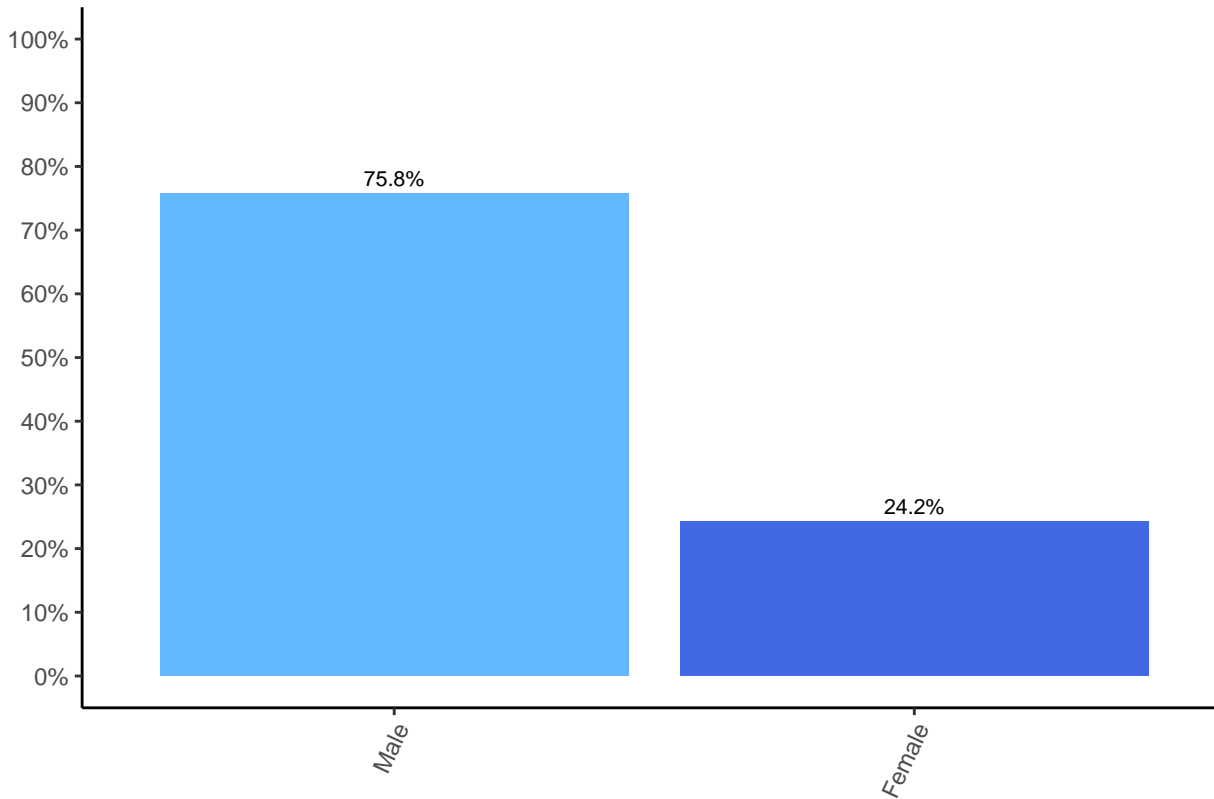
1.1.7 Bachelor's Degrees Awarded by Race and Ethnicity

Table 7: Bachelor's Degrees Awarded by Ethnicity

Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Black or Afr. American	4.5%	4.2%	4.2%	4.3%	3.5%	4.0%	3.9%	4.1%	4.2%	4.3%	4.5%	4.7%
Hispanic	7.0%	8.5%	9.0%	9.3%	10.1%	10.7%	10.7%	11.1%	11.4%	12.1%	13%	13.6%
Other	1.2%	1.6%	2.0%	2.3%	2.9%	3.1%	3.6%	3.8%	3.5%	4.3%	4.4%	4.6%
Asian American	12.2%	12.2%	12.2%	12.9%	13.1%	13.4%	14.2%	14.6%	14.7%	14.7%	14.9%	15.6%
White	69.8%	66.6%	66.2%	65.7%	65.9%	64.9%	63.4%	62.3%	61.5%	60.8%	59.6%	58%
Unknown	5.3%	6.9%	6.5%	5.6%	4.5%	3.9%	4.2%	4.1%	4.2%	3.8%	3.6%	3.6%

*Data on ethnicity does not include foreign nationals. American Indian/Alaska Native (0.3%), Native Hawaiian/Other Pacific Islander(0.2%) and Multiracial (4.3%) are combined under Other.

Bachelor's Degrees Awarded by Race and Ethnicity

Bar chart values:
- Black or Afr. American: 4.8%
- Hispanic: 14.1%
- Other: 4.7%
- Asian American: 16.6%
- White: 56.1%
- Unknown: 3.7%
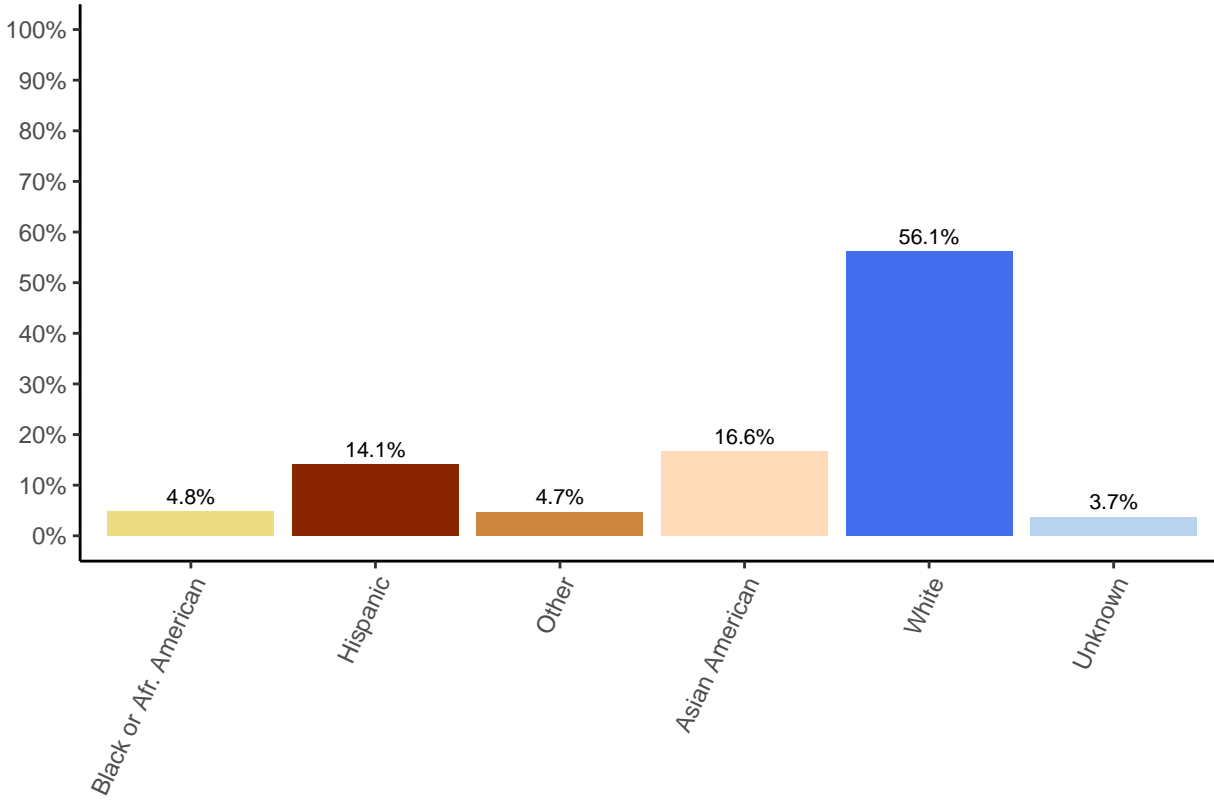
1.1.8 Bachelor's Degrees Awarded by Residency

Table 8: Bachelor's Degrees Awarded by Residency

Nationality	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Foreign	6.2%	6.2%	6.7%	7.5%	7.8%	8.5%	9.1%	9.6%	10.1%	11.2%	11.2%	10.6%
Domestic	94.0%	93.8%	93.3%	92.5%	92.2%	91.5%	90.9%	90.4%	89.9%	88.8%	88.8%	89.4%

Bachelor's Degrees Awarded by Residency

Bar chart values:
- Domestic: 90%
- Foreign: 10%
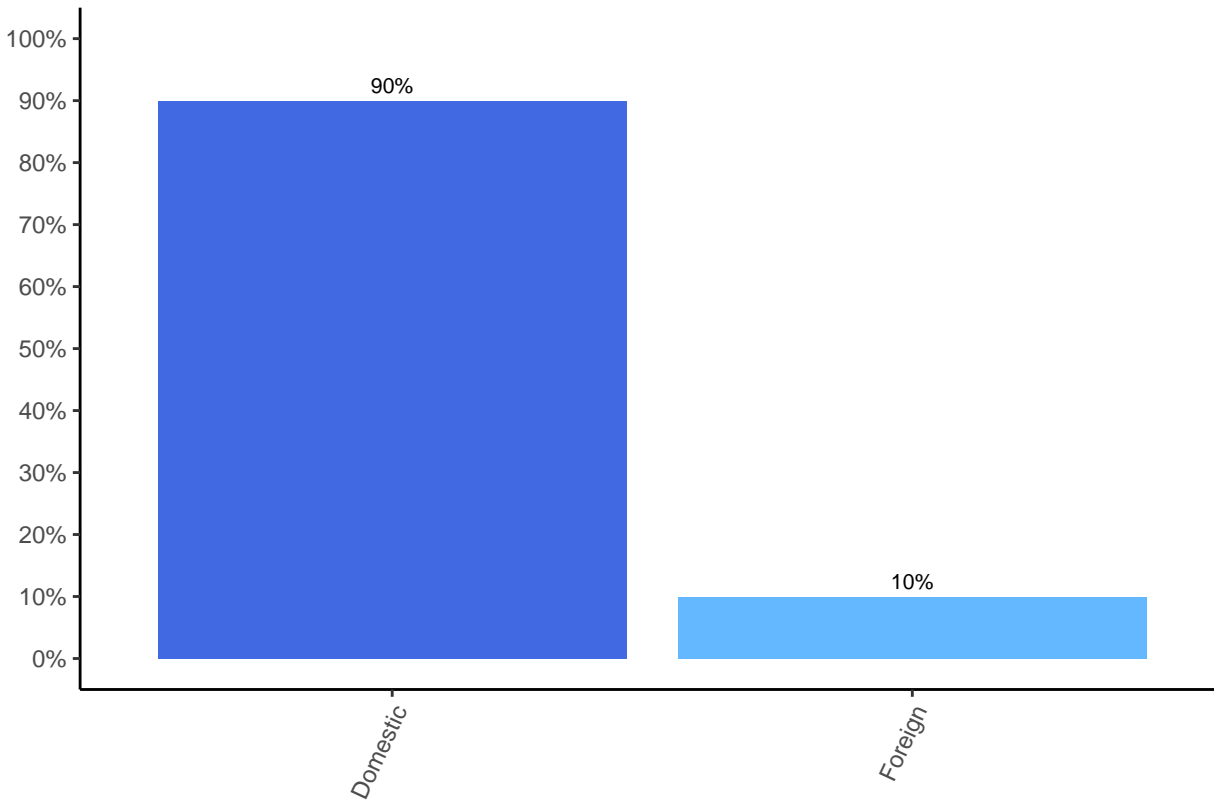
1.1.9 Bachelor's Degrees Awarded by Race, Ethnicity and Gender

Table 9: Bachelor's Degrees Awarded by Race, Ethnicity, and Gender 141,826*

Ethnicity	Degrees Awarded
Nonresident Alien Male	10,553
Nonresident Alien Female	3,126
Unknown Male	2,892
Unknown Female	1,137
Hispanic Male	13,637
Hispanic Female	4,418
White Male	55,590
White Female	16,296
Black or Afr. American Male	4,313
Black or Afr. American Female	1,818
Asian American Male	14,864
Asian American Female	6,403
American Indian Male	257
American Indian Female	74
Native Hawaiian/Other Pacific Islander Male	148
Native Hawaiian/Other Pacific Islander Female	48
Multiracial Male	3,978
Multiracial Female	1,505
Total Male	106,232
Total Female	34,825

* Total degree includes 40 total Non binary graduates and 755 total Other Gender graduates.
* Includes 441 male and163 female graduates from Puerto Rico.

Bachelor's Degrees Awarded by Race, Ethnicity, and Gender
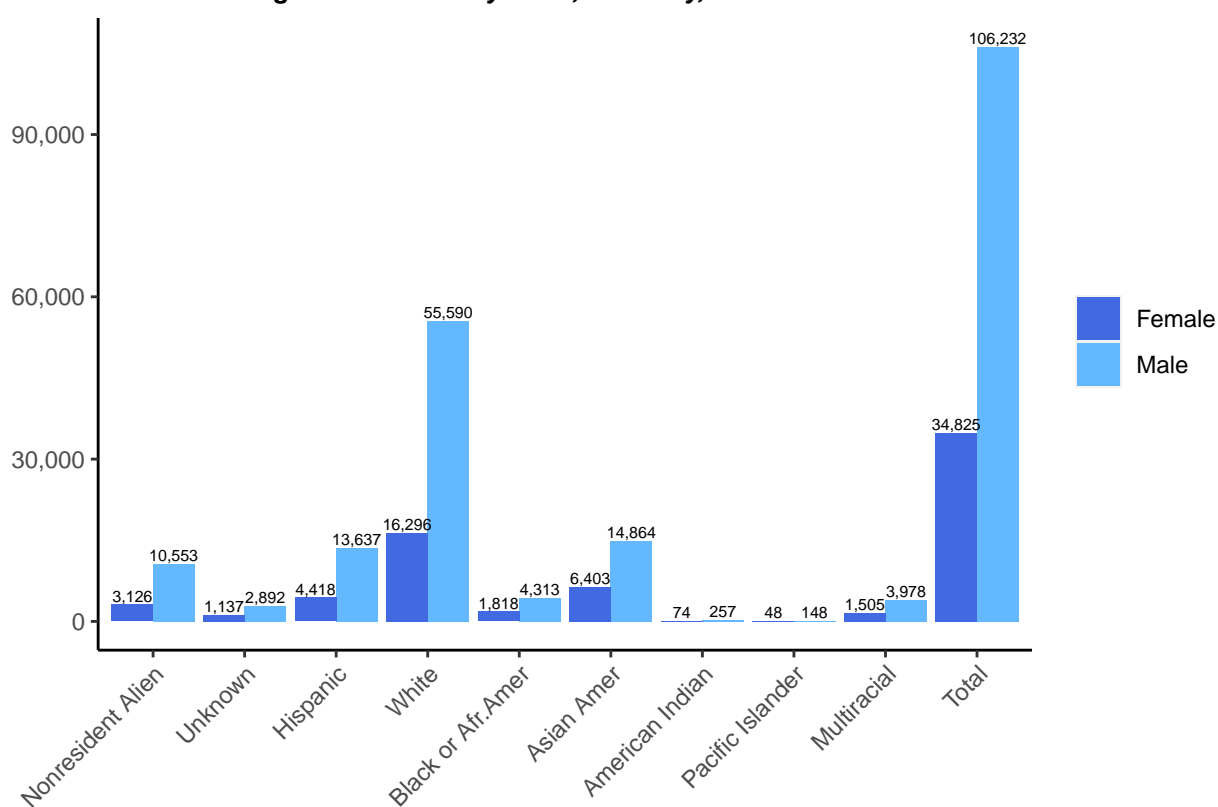
1.1.10 Top 50 Institutions by Total Bachelor's Degrees awarded to Underrepresented Minorities

Table 10: Top 50 Institutions by Total Bachelor's Degrees awarded
to Underrepresented Minorities

No	Institutions	Degrees Awarded
1	Florida International University	1,052
2	University of Central Florida	720
3	Texas A&M University	638
4	University of Puerto Rico, Mayaguez Campus	604
5	Arizona State University	549
6	The University of Texas at San Antonio	496
7	University of Florida	469
8	The University of Texas at El Paso	462
9	California State Polytechnic University, Pomona	428
10	California State University, Long Beach	421
11	The University of Texas Rio Grande Valley	398
12	Georgia Institute of Technology	371
13	New Jersey Institute of Technology	329
14	North Carolina A&T State University	328
15	California State University, Northridge	326
16	University of California, Irvine	323
17	Texas Tech University	298
18	University of Houston	283

Table 10: Top 50 Institutions by Total Bachelor's Degrees awarded
to Underrepresented Minorities *(continued)*

No	Institutions	Degrees Awarded
19	The University of Texas at Austin	261
20	California State University, Sacramento	260
20	University of California, San Diego	260
22	The University of Texas at Dallas	258
23	University of Maryland, College Park	252
24	The University of Texas at Arlington	246
25	George Mason University	236
26	California Polytechnic State University, San Luis Obispo	231
27	Kennesaw State University	229
28	University of South Florida	222
29	University of Illinois at Chicago	219
30	University of Michigan	208
31	University of California, Merced	203
32	Rutgers, The State University of New Jersey, School of Engineering	200
33	University of California, Riverside	197
34	FAMU-FSU College of Engineering	193
35	New Mexico State University	191
35	University of North Carolina at Charlotte	191
37	Massachusetts Institute of Technology	185
38	University of Maryland, Baltimore County	180
39	San Diego State University	178
40	University of Illinois at Urbana-Champaign	170
41	Oregon State University	169
41	Purdue University	169
43	San Jose State University	162
44	North Carolina State University	157
45	University of California, Berkeley	156
45	University of Colorado Boulder	156
47	Virginia Polytechnic Institute and State University	155
48	University of North Texas	150
49	City College of the City University of New York	148
49	Mississippi State University	148

* 418 Institutions included

1.1.11 Top 50 Institutions by Total Bachelor's Degrees awarded to Women

Table 11: Top 50 Institutions by Total Bachelor's Degrees awarded
to Women

No	Institutions	Degrees Awarded
1	Georgia Institute of Technology	998
2	Purdue University	694
3	Texas A&M University	641
4	University of Michigan	609
5	University of Illinois at Urbana-Champaign	583
6	University of California, Irvine	556
7	University of California, Berkeley	534
8	Arizona State University	511
9	The University of Texas at Austin	477
10	University of Florida	469
11	Northeastern University	453
12	University of Maryland, College Park	452
13	The Ohio State University	431
13	The Pennsylvania State University	431
15	North Carolina State University	417
16	Cornell University	416
17	Virginia Polytechnic Institute and State University	411
18	University of Wisconsin-Madison	392
19	Massachusetts Institute of Technology	391
20	University of California, San Diego	390
21	Oregon State University	380
21	Worcester Polytechnic Institute	380
23	Rutgers, The State University of New Jersey, School of Engineering	375
24	University of Central Florida	373
25	Stony Brook University	361
26	University of Virginia	357
27	California Polytechnic State University, San Luis Obispo	356
28	University of Colorado Boulder	334
29	University of California, Los Angeles	320
30	Florida International University	314
31	Rensselaer Polytechnic Institute	311
32	University of Minnesota -Twin Cities	305
33	Clemson University	289
33	Iowa State University	289
35	George Mason University	288
36	Colorado School of Mines	287
37	Carnegie Mellon University	286
38	University of Southern California	283
39	The University of Texas at Dallas	274

Table 11: Top 50 Institutions by Total Bachelor's Degrees awarded
to Women *(continued)*

No	Institutions	Degrees Awarded
40	University of California, Davis	255
41	Fu Foundation School of Engineering and Applied Science - Columbia University	253
42	California State Polytechnic University, Pomona	250
43	New Jersey Institute of Technology	246
44	Michigan State University	245
45	Stanford University	243
46	Louisiana State University	240
47	University of Houston	234
48	Mississippi State University	232
49	Auburn University	231
50	University of Pittsburgh	230

* 418 Institutions included

1.1.12 Top 50 Institutions by Percentage of Bachelor's Degrees awarded to Underrepresented Minorities

Table 12: Top 50 Institutions by Percentage of Bachelor's Degrees
awarded to Underrepresented Minorities

No	Institutions	Percent Underrepresented Minorities
1	Navajo Technical University	100%
1	University of Puerto Rico, Mayaguez Campus	100%
3	Southern University and A & M College	97.4%
4	Hampton University	92.9%
5	The University of Texas Rio Grande Valley	90%
6	Alabama A & M University	88.2%
7	Central State University	87.5%
7	Norfolk State University	87.5%
9	Jackson State University	87.3%
10	North Carolina A&T State University	87.2%
11	Texas A & M International University	87.2%
12	Virginia State University	83%
13	The University of Texas at El Paso	82.4%
14	Tuskegee University	76.1%
15	Prairie View A & M University	75.9%
16	Bethune-Cookman University	75%
17	Howard University	74%
18	Florida International University	69.3%
19	University of Maryland Eastern Shore	66.7%
20	St. Mary's University	60%
21	The University of Texas at San Antonio	58.9%
22	South Carolina State University	57.1%
22	University of the District of Columbia	57.1%
24	University of Texas of the Permian Basin	55.7%
25	Morgan State University	55.6%
26	New Mexico State University	53.5%
27	California State University-San Bernardino	51.2%
28	California State University-Fresno	47.6%
29	New Mexico Institute of Mining and Technology	45.4%
30	Texas A & M University-Corpus Christi	45.4%
31	California State University, Northridge	44.5%
32	University of California, Merced	43.8%
33	California State University-Bakersfield	43.5%
34	Florida Atlantic University	43.2%
35	The University of New Mexico	42.9%
36	Texas State University	41.3%
37	Benjamin Franklin Institute of Technology	40%
38	Texas A & M University-Commerce	39.5%
39	California State University, Long Beach	39.2%
40	Vaughn College of Aeronautics and Technology	38.9%
41	Texas Southern University	38.8%
42	Capitol Technology University	37.5%
43	California State Polytechnic University, Pomona	37%
44	Texas Tech University	36.9%
45	The University of Texas at Tyler	36.9%
46	Tennessee State University	36.5%
47	Thomas Jefferson University	35.3%
48	Stephen F Austin State University	35%
49	Andrews University	34.5%
49	Fairleigh Dickinson University-Metropolitan Campus	34.5%

* 418 Institutions included

1.1.13 Top 20 Institutions by Percentage of Bachelor's Degrees awarded to Women

Table 13: Top 20 Institutions by Percentage of Bachelor's Degrees awarded to Women

No	Institutions	Percent Women
1	Navajo Technical University	100%
1	Smith College	100%
1	Sweet Briar College	100%
4	Harvey Mudd College	54.9%
5	Loyola University Chicago	53.8%
6	Olin College of Engineering	52.8%
7	Coe College	50%
7	Millikin University	50%
9	Cornell University	49.2%
10	Massachusetts Institute of Technology	48.3%
11	Tufts University	45.4%
12	Fu Foundation School of Engineering and Applied Science - Columbia University	45.2%
13	The George Washington University	43.7%
14	California Institute of Technology	43.2%
15	Carnegie Mellon University	42.9%
16	South Carolina State University	42.9%
17	Princeton University	41.9%
18	Brown University	41.3%
19	Hope College	41.2%
19	Thomas Jefferson University	41.2%

* 418 Institutions included

1.1.14 Top 20 Institutions by Total Bachelor's Degrees awarded to African Americans

Table 14: Top 20 Institutions by Total Bachelor's Degrees awarded to African Americans

No	Institutions	Degrees Awarded
1	North Carolina A&T State University	309
2	Georgia Institute of Technology	156
3	University of Central Florida	129
4	University of Maryland, Baltimore County	127
4	University of Maryland, College Park	127
6	Prairie View A & M University	122
7	Kennesaw State University	121
8	Mississippi State University	119
9	Florida International University	117
10	George Mason University	101
11	Morgan State University	87
11	New Jersey Institute of Technology	87
13	Tuskegee University	84
14	Arizona State University	82
14	University of North Carolina at Charlotte	82
16	Southern University and A & M College	74
17	FAMU-FSU College of Engineering	70
18	University at Buffalo, SUNY	68
19	Louisiana State University	67
20	Texas A&M University	65

* 418 Institutions included

1.1.15 Top 20 Institutions by Total Bachelor's Degrees awarded to Asian Americans

Table 15: Top 20 Institutions by Total Bachelor's Degrees awarded to Asian Americans

No	Institutions	Degrees Awarded
1	University of California, Irvine	1,019
2	University of California, Berkeley	961
3	University of California, San Diego	926
4	Georgia Institute of Technology	828
5	University of Illinois at Urbana-Champaign	705
6	The University of Texas at Austin	670
7	Rutgers, The State University of New Jersey, School of Engineering	585
8	University of Michigan	514
9	University of California, Los Angeles	493
10	The University of Texas at Dallas	482
11	University of Maryland, College Park	468
12	Stony Brook University	440
13	George Mason University	436
14	Purdue University	425
15	Texas A&M University	415
16	New Jersey Institute of Technology	374
17	San Jose State University	372
18	University of California-Santa Cruz	342
19	Arizona State University	313
20	California State University, Long Beach	309

* 418 Institutions included

1.1.16 Top 20 Institutions by Total Bachelor's Degrees awarded to Hispanics

Table 16: Top 20 Institutions by Total Bachelor's Degrees awarded to Hispanics

No	Institutions	Degrees Awarded
1	Florida International University	932
2	University of Puerto Rico, Mayaguez Campus	604
3	University of Central Florida	588
4	Texas A&M University	566
5	The University of Texas at El Paso	454
6	The University of Texas at San Antonio	452
7	Arizona State University	450
8	University of Florida	422
9	California State Polytechnic University, Pomona	404
10	The University of Texas Rio Grande Valley	396
11	California State University, Long Beach	388
12	California State University, Northridge	315
13	University of California, Irvine	297
14	New Jersey Institute of Technology	241
15	Texas Tech University	238
16	University of California, San Diego	232
17	California State University, Sacramento	228
18	University of Houston	222
19	The University of Texas at Austin	217
20	California Polytechnic State University, San Luis Obispo	215

* 418 Institutions included

1.1.17 Top 20 Institutions by Total Bachelor's Degrees awarded in Aerospace Engineering

Table 17: Top 20 Institutions by Total Bachelor's Degrees awarded in Aerospace Engineering

No	Institutions	Degrees Awarded
1	Purdue University	298
2	Embry Riddle Aeronautical University-Daytona Beach	242
3	Georgia Institute of Technology	215
4	University of Central Florida	204
5	University of Colorado Boulder	199
6	Virginia Polytechnic Institute and State University	198
7	Texas A&M University	183
8	University of Michigan	165
9	California State Polytechnic University, Pomona	161
10	Iowa State University	158
11	University of Maryland, College Park	140
12	Embry Riddle Aeronautical University, Prescott	125
13	University of Florida	123
14	The University of Alabama in Huntsville	121
15	University of Illinois at Urbana-Champaign	120
16	Oklahoma State University	118
17	The University of Texas at Austin	116
18	The Pennsylvania State University	112
19	Rensselaer Polytechnic Institute	108
20	California Polytechnic State University, San Luis Obispo	105

* 61 Institutions included

1.1.18 Top 20 Institutions by Total Bachelor's Degrees awarded in Biomedical Engineering

Table 18: Top 20 Institutions by Total Bachelor's Degrees awarded in Biomedical Engineering

No	Institutions	Degrees Awarded
1	Georgia Institute of Technology	278
2	Northeastern University	162
3	University of California, Irvine	156
4	Texas A&M University	149
5	University of California, San Diego	132
6	Worcester Polytechnic Institute	130
7	Arizona State University	129
8	North Carolina State University	127
8	University of Virginia	127
10	Boston University	126
11	The University of Texas at Austin	118
12	Clemson University	116
13	Purdue University	112
14	California Polytechnic State University, San Luis Obispo	106
14	University of Wisconsin-Madison	106
16	University of Florida	105
17	Rutgers, The State University of New Jersey, School of Engineering	103
17	University of Michigan	103
19	The Johns Hopkins University	100
19	University of California, Davis	100

Table 18: Top 20 Institutions by Total Bachelor's Degrees awarded
in Biomedical Engineering *(continued)*

No	Institutions	Degrees Awarded

* 150 Institutions included

1.1.19 Top 50 Institutions by Total Bachelor's Degrees awarded in Chemical Engineering

Table 19: Top 50 Institutions by Total Bachelor's Degrees awarded
in Chemical Engineering

No	Institutions	Degrees Awarded
1	Texas A&M University	242
2	The Ohio State University	186
3	Georgia Institute of Technology	183
4	The Pennsylvania State University	172
5	Purdue University	164
6	The University of Alabama	161
7	North Carolina State University	160
8	University of Illinois at Urbana-Champaign	155
9	Colorado School of Mines	144
10	The University of Texas at Austin	131
11	University of California, San Diego	126
12	Iowa State University	123
13	Michigan State University	115
14	Arizona State University	114
15	Mississippi State University	105
15	University of Florida	105
17	Michigan Technological University	103
17	University of California, Berkeley	103
19	University of Wisconsin-Madison	102
20	Rutgers, The State University of New Jersey, School of Engineering	100
21	Texas Tech University	96
21	University of South Florida	96
23	University of Delaware	94
23	University of Pittsburgh	94
25	Auburn University	93
25	University of Puerto Rico, Mayaguez Campus	93
27	Worcester Polytechnic Institute	92
28	California State Polytechnic University, Pomona	90
29	Missouri University of Science and Technology	89
30	Montana State University	86
30	Northeastern University	86
30	University of Minnesota -Twin Cities	86
33	Louisiana State University	82
33	University of California, Irvine	82
35	University of Kentucky	81
36	University of California, Los Angeles	79
37	Oregon State University	78
37	University of Notre Dame	78
39	University of California, Davis	76
40	Colorado State University	75
40	University of Houston	75
42	The Johns Hopkins University	73
42	University of Michigan	73
44	New Jersey Institute of Technology	71
44	Virginia Polytechnic Institute and State University	71
46	Brigham Young University	68
46	Drexel University	68
46	University of Utah	68
49	Rensselaer Polytechnic Institute	66
50	University of Connecticut	65

* 155 Institutions included

1.1.20 Top 50 Institutions by Total Bachelor's Degrees awarded in Civil Engineering

Table 20: Top 50 Institutions by Total Bachelor's Degrees awarded
in Civil Engineering

No	Institutions	Degrees Awarded
1	California State Polytechnic University, Pomona	328
2	San Diego State University	227
3	Purdue University	207
4	Texas A&M University	204
4	Virginia Polytechnic Institute and State University	204
6	New Jersey Institute of Technology	195
7	Iowa State University	193
7	The University of Texas at Arlington	193
9	University of Nevada, Reno	184
10	University at Buffalo, SUNY	166
11	California State University, Long Beach	165
12	Florida International University	157
12	University of Illinois at Urbana-Champaign	157

Table 20: Top 50 Institutions by Total Bachelor's Degrees awarded
in Civil Engineering *(continued)*

No	Institutions	Degrees Awarded
14	University of Central Florida	155
15	California State University, Sacramento	154
16	The Pennsylvania State University	149
17	The University of Texas at Austin	142
18	Missouri University of Science and Technology	134
19	California Polytechnic State University, San Luis Obispo	131
19	Clemson University	131
21	University of Florida	128
22	Oregon State University	126
23	North Carolina State University	123
23	University of California, Irvine	123
25	Auburn University	120
25	University of California, Davis	120
25	University of Maryland, College Park	120
28	Colorado State University	109
29	Louisiana State University	108
29	University of Illinois at Chicago	108
31	FAMU-FSU College of Engineering	106
31	Georgia Institute of Technology	106
33	University of California, Berkeley	105
34	University of California, San Diego	104
35	Mississippi State University	102
36	Washington State University	101
37	University of Wisconsin-Madison	98
38	West Virginia University	95
39	George Mason University	93
39	The University of Texas at San Antonio	93
41	California State University, Northridge	92
41	San Jose State University	92
43	Manhattan College	89
43	Montana State University	89
43	Northeastern University	89
46	University of Nebraska, Lincoln	88
47	University of South Florida	85
48	University of Kentucky	84
49	The University of Texas Rio Grande Valley	83
49	University of Hawaii at Manoa	83

* 226 Institutions included

1.1.21 Top 50 Institutions by Total Bachelor's Degrees awarded in Industrial/Manufacturing Engineering

Table 21: Top 50 Institutions by Total Bachelor's Degrees awarded
in Industrial/Manufacturing Engineering

No	Institutions	Degrees Awarded
1	Georgia Institute of Technology	382
2	Arizona State University	320
3	Texas A&M University	268
4	Purdue University	262
5	Clemson University	205
6	Virginia Polytechnic Institute and State University	191
7	University of Illinois at Urbana-Champaign	171
8	University of Michigan	170
9	University of Arizona	159
10	The Ohio State University	156
11	The Pennsylvania State University	153
12	Iowa State University	132
13	University of Central Florida	131
14	University of Florida	123
15	University of Wisconsin-Madison	118
16	West Virginia University	105
17	California State Polytechnic University, Pomona	102
17	North Carolina State University	102
19	University of Puerto Rico, Mayaguez Campus	97
20	Auburn University	96
21	California Polytechnic State University, San Luis Obispo	87
21	Lehigh University	87
23	Cornell University	81
23	University of Virginia	81
25	Stanford University	77
26	University of Minnesota -Twin Cities	75
27	Mississippi State University	68
27	Oregon State University	68
27	University of Pittsburgh	68
30	The State University of New York at Binghamton	66
31	University of California, Berkeley	64
32	University of Southern California	57
33	Northwestern University	55
33	Rensselaer Polytechnic Institute	55

Table 21: Top 50 Institutions by Total Bachelor's Degrees awarded
in Industrial/Manufacturing Engineering *(continued)*

No	Institutions	Degrees Awarded
33	University of South Florida	55
36	Louisiana State University	54
37	University of Oklahoma, Gallogly College of Engineering	53
38	Kansas State University	50
38	North Dakota State University	50
38	The University of Texas at El Paso	50
41	Southern Illinois University Edwardsville	49
42	University at Buffalo, SUNY	48
42	University of Miami	48
44	Texas Tech University	45
45	Oklahoma State University	43
45	University of Tennessee, Knoxville	43
47	North Carolina A&T State University	42
48	Rochester Institute of Technology	41
48	Rutgers, The State University of New Jersey, School of Engineering	41
48	South Dakota School of Mines and Technology	41

* 117 Institutions included

1.1.22   Top 50 Institutions by Total Bachelor's Degrees awarded in Mechanical Engineering

Table 22: Top 50 Institutions by Total Bachelor's Degrees awarded
in Mechanical Engineering

No	Institutions	Degrees Awarded
1	University of Central Florida	455
2	Purdue University	430
3	Georgia Institute of Technology	421
4	Texas A&M University	417
5	Iowa State University	407
6	Northeastern University	356
7	University of Maryland, College Park	352
8	The University of Alabama	343
9	University at Buffalo, SUNY	336
10	Oregon State University	325
11	Virginia Polytechnic Institute and State University	319
12	The Pennsylvania State University	311
13	University of Florida	310
14	Colorado School of Mines	299
15	University of Illinois at Urbana-Champaign	293
16	University of Michigan	275
17	California State Polytechnic University, Pomona	273
18	Oklahoma State University	269
18	Washington State University	269
20	The University of Texas at Austin	263
21	University of California, Irvine	260
22	Kennesaw State University	259
23	North Carolina State University	248
24	Texas Tech University	246
25	California Polytechnic State University, San Luis Obispo	244
26	Clemson University	241
27	Mississippi State University	240
27	San Diego State University	240
29	Auburn University	238
29	Worcester Polytechnic Institute	238
31	University of Colorado Boulder	235
32	Kettering University	233
33	The University of Texas at Dallas	231
34	California State University, Long Beach	230
34	Michigan State University	230
36	New Jersey Institute of Technology	225
37	University of South Florida	223
38	Rensselaer Polytechnic Institute	215
39	University of Dayton	214
40	The Ohio State University	211
41	Missouri University of Science and Technology	210
42	University of Houston	204
43	University of Minnesota -Twin Cities	202
44	Georgia Southern University	197
45	University of California, Davis	188
46	The University of Texas at El Paso	187
47	California State University, Sacramento	186
47	University of Tennessee, Knoxville	186
49	University of California, Berkeley	184
49	University of California, Merced	184

* 312 Institutions included

1.1.23 Top 50 Institutions by Total Bachelor's Degrees awarded in Electrical Engineering

Table 23: Top 50 Institutions by Total Bachelor's Degrees awarded in Electrical Engineering

No	Institutions	Degrees Awarded
1	Arizona State University	582
2	Texas A&M University	284
3	Florida International University	221
4	University of California, San Diego	212
5	Purdue University	203
6	North Carolina State University	184
7	The Pennsylvania State University	182
8	University of Illinois at Urbana-Champaign	177
9	Georgia Institute of Technology	158
10	University of Central Florida	151
11	University of California, Los Angeles	143
12	California State University, Long Beach	142
13	California Polytechnic State University, San Luis Obispo	139
14	The University of Texas at Dallas	125
15	University of Florida	123
16	University of Michigan-Dearborn	121
17	Rochester Institute of Technology	120
18	University of Michigan	119
19	Oakland University	114
20	University of Maryland, College Park	112
20	Washington State University	112
22	University at Buffalo, SUNY	110
23	California State Polytechnic University, Pomona	107
24	San Diego State University	106
24	University of Massachusetts Lowell	106
26	Michigan Technological University	105
26	Rensselaer Polytechnic Institute	105
28	Iowa State University	104
28	Virginia Polytechnic Institute and State University	104
30	Kennesaw State University	103
30	University of North Carolina at Charlotte	103
32	Stevens Institute of Technology	100
32	University of California, Davis	100
32	University of Wisconsin-Madison	100
35	Brigham Young University - Idaho	99
35	San Jose State University	99
37	University of Illinois at Chicago	97
38	University of South Florida	95
39	California State University, Sacramento	93
40	The University of Texas at San Antonio	92
41	New Jersey Institute of Technology	91
41	New York Institute of Technology	91
43	Missouri University of Science and Technology	88
44	University of Washington-Bothell Campus	85
45	Georgia Southern University	84
45	University of Houston	84
47	Drexel University	83
48	City College of the City University of New York	81
49	Colorado School of Mines	80
50	Mississippi State University	79

* 288 Institutions included

1.1.24 Top 50 Institutions by Total Bachelor's Degrees awarded in Computer Engineering

Table 24: Top 50 Institutions by Total Bachelor's Degrees awarded in Computer Engineering

No	Institutions	Degrees Awarded
1	University of Illinois at Urbana-Champaign	318
2	Purdue University	297
3	Iowa State University	295
4	University of Central Florida	192
5	Texas A&M University	189
6	Virginia Polytechnic Institute and State University	184
7	Georgia Institute of Technology	157
8	University of California-Santa Cruz	155
9	North Carolina State University	135
10	University of California, San Diego	130
11	Northeastern University	126
12	Boston University	122
13	Florida International University	121

No	Institutions	Degrees Awarded
14	University of Florida	117
15	San Diego State University	116
15	University of Michigan	116
17	University of Wisconsin-Madison	115
18	University of Maryland, College Park	113
19	University of Pittsburgh	99
20	California State Polytechnic University, Pomona	97
21	University of California, Los Angeles	96
22	California Polytechnic State University, San Luis Obispo	91
22	The University of Texas at Dallas	91
24	San Jose State University	90
25	Santa Clara University	84
26	Rensselaer Polytechnic Institute	82
27	The Pennsylvania State University	81
28	Arizona State University	77
29	California State University, Long Beach	75
29	University of North Carolina at Charlotte	75
31	Florida Gulf Coast University	72
31	University of California, Irvine	72
31	University of California, Santa Barbara	72
31	University of Illinois at Chicago	72
35	University of Massachusetts Lowell	66
36	Drexel University	62
36	University of Puerto Rico, Mayaguez Campus	62
38	California State University, Sacramento	61
38	Florida Atlantic University	61
38	University of Minnesota -Twin Cities	61
41	Michigan Technological University	59
41	Missouri University of Science and Technology	59
43	The University of Alabama in Huntsville	58
44	University of Massachusetts Amherst	57
45	Stony Brook University	56
46	City College of the City University of New York	54
46	University of Kentucky	54
46	Wentworth Institute of Technology	54
49	Rochester Institute of Technology	53
50	University of South Florida	52

* 212 Institutions included

1.1.25 Top 20 Institutions by Total Bachelor's Degrees awarded in Electrical/Computer Engineering

Table 25: Top 20 Institutions by Total Bachelor's Degrees awarded
in Electrical/Computer Engineering

No	Institutions	Degrees Awarded
1	University of California, Berkeley	513
2	The University of Texas at Austin	320
3	Rutgers, The State University of New Jersey, School of Engineering	224
4	The Ohio State University	200
5	Carnegie Mellon University	166
6	Duke University	126
7	Massachusetts Institute of Technology	114
7	Oregon State University	114
9	Texas Tech University	105
10	The University of Iowa	103
11	Brigham Young University	101
11	University of Arizona	101
13	University of Southern California	90
14	The State University of New York at Binghamton	89
15	Colorado State University	88
16	Cornell University	87
17	Worcester Polytechnic Institute	78
18	University of Connecticut	75
19	University of Colorado Boulder	69
20	Wayne State University	65

* 40 Institutions included

1.1.26 Top 20 Institutions by Total Bachelor's Degrees awarded in Computer Science (outside engineering)

Table 26: Top 20 Institutions by Total Bachelor's Degrees awarded
in Computer Science (outside engineering)

No	Institutions	Degrees Awarded
1	University of California, Irvine	1,081
2	Georgia Institute of Technology	847
3	University of Maryland, College Park	806
4	University of Wisconsin-Madison	738
5	University of California, Berkeley	697
6	Rutgers, The State University of New Jersey, School of Engineering	613
7	University of North Carolina at Charlotte	589
8	Northeastern University	548
9	New Jersey Institute of Technology	531
10	University of Michigan	465
11	The University of Texas at Austin	456
12	University of Massachusetts Amherst	441
13	Purdue University	419
14	University of North Carolina at Chapel Hill	335
15	Southern New Hampshire University	331
16	University of Houston	320
17	Rensselaer Polytechnic Institute	284
18	Carnegie Mellon University	269
19	Texas State University	255
20	The University of Texas at San Antonio	246

* 175 Institutions included

1.1.27 Top 50 Institutions by Total Bachelor's Degrees awarded in Computer Science (inside engineering)

Table 27: Top 50 Institutions by Total Bachelor's Degrees awarded
in Computer Science (inside engineering)

No	Institutions	Degrees Awarded
1	Oregon State University	877
2	The University of Texas at Dallas	796
3	University of Central Florida	765
4	Florida International University	667
5	University of Michigan	652
6	University of California, San Diego	627
7	University of Illinois at Urbana-Champaign	571
8	Arizona State University	526
9	University of California-Santa Cruz	504
10	The Ohio State University	404
11	George Mason University	383
12	Texas A&M University	369
13	The Pennsylvania State University	367
14	Virginia Polytechnic Institute and State University	366
15	University of Minnesota -Twin Cities	362
16	University of Utah	359
17	University of California, Los Angeles	349
18	The University of Texas at Arlington	343
19	California State University, Northridge	339
20	Cornell University	331
21	University of Illinois at Chicago	330
22	Stony Brook University	326
23	University at Buffalo, SUNY	321
24	University of Southern California	319
25	University of Maryland, Baltimore County	314
26	Auburn University	305
26	Massachusetts Institute of Technology	305
28	University of Georgia	292
29	North Carolina State University	281
30	California State University, Sacramento	280
31	Stanford University	277
32	University of North Texas	268
33	University of Pennsylvania	260
34	California State University, Long Beach	258
35	University of Colorado Boulder	249

Table 27: Top 50 Institutions by Total Bachelor's Degrees awarded
in Computer Science (inside engineering) *(continued)*

No	Institutions	Degrees Awarded
36	University of Florida	246
37	Washington University in St. Louis	241
38	Michigan State University	240
38	University of California, Riverside	240
40	University of Virginia	224
41	California Polytechnic State University, San Luis Obispo	223
42	University of California, Merced	220
43	Washington State University	185
44	Clemson University	184
45	University of South Carolina	182
46	University of South Florida	181
47	NYU Tandon School of Engineering	175
48	Fu Foundation School of Engineering and Applied Science - Columbia University	174
48	University of Connecticut	174
50	Oakland University	171

* 129 Institutions included

1.1.28 Top 50 Institutions by Total Bachelor's Degrees awarded in Engineering (General)

Table 28: Top 50 Institutions by Total Bachelor's Degrees awarded
in Engineering (General)

No	Institutions	Degrees Awarded
1	Dartmouth College	201
2	Mercer University	115
3	East Carolina University	87
4	James Madison University	76
5	Stanford University	74
6	Arizona State University	72
7	Brown University	67
8	McNeese State University	63
9	Massachusetts Maritime Academy	60
10	Harvey Mudd College	51
10	Hope College	51
12	Geneva College	50
13	Olivet Nazarene University	48
14	Texas Christian University	45
15	Campbell University	44
16	Loyola University Maryland	42
17	Elizabethtown College	38
17	Olin College of Engineering	38
19	Smith College	37
19	Vanderbilt University	37
21	North Carolina State University	35
22	Minnesota State University-Mankato	34
22	Rutgers, The State University of New Jersey, School of Engineering	34
24	Western Carolina University	29
25	Swarthmore College	28
25	University of North Carolina at Asheville	28
25	University of Southern Indiana	28
28	Oral Roberts University	27
29	Frostburg State University	24
29	The University of Tennessee-Martin	24
31	College of Staten Island CUNY	23
32	The University of Mississippi	22
33	Fort Lewis College	21
34	Trinity College	20
35	University of Maryland Eastern Shore	18
35	University of San Diego	18
37	Abilene Christian University	17
37	Southern Arkansas University Main Campus	17
37	University of Missouri	17
40	Andrews University	16
40	Boise State University	16
40	Stevens Institute of Technology	16
40	Texas A&M University	16
44	Marshall University	15
45	Loyola University Chicago	13
45	Seattle Pacific University	13
47	Northwest Nazarene University	12
47	Southern Utah University	12
49	Wentworth Institute of Technology	11
50	Bob Jones University	10

No	Institutions	Degrees Awarded

* 88 Institutions included

1.2 ENGINEERING UNDERGRADUATE ENROLLMENT, FALL 2022

1.2.1 Undergraduate Enrollment by Race, Ethnicity, and Gender

Table 29: Undergraduate Enrollment Awarded by Race, Ethnicity, and Gender 571,219*

Ethnicity	Enrollments
Nonresident Alien Male	33,013
Nonresident Alien Female	10,967
Unknown Male	12,885
Unknown Female	5,276
Hispanic Male	63,270
Hispanic Female	21,667
White Male	207,254
White Female	62,093
Black or Afr. American Male	20,340
Black or Afr. American Female	8,672
Asian American Male	66,341
Asian American Female	28,106
American Indian Male	1,045
American Indian Female	402
Native Hawaiian/Other Pacific Islander Male	598
Native Hawaiian/Other Pacific Islander Female	235
Multiracial Male	18,439
Multiracial Female	7,075
Total Male	423,185
Total Female	144,493

* Total Enrollment includes is for full time students

* Includes 2,990 male and 1,138 female.

Undergraduate Enrollment by Race, Ethnicity, and Gender
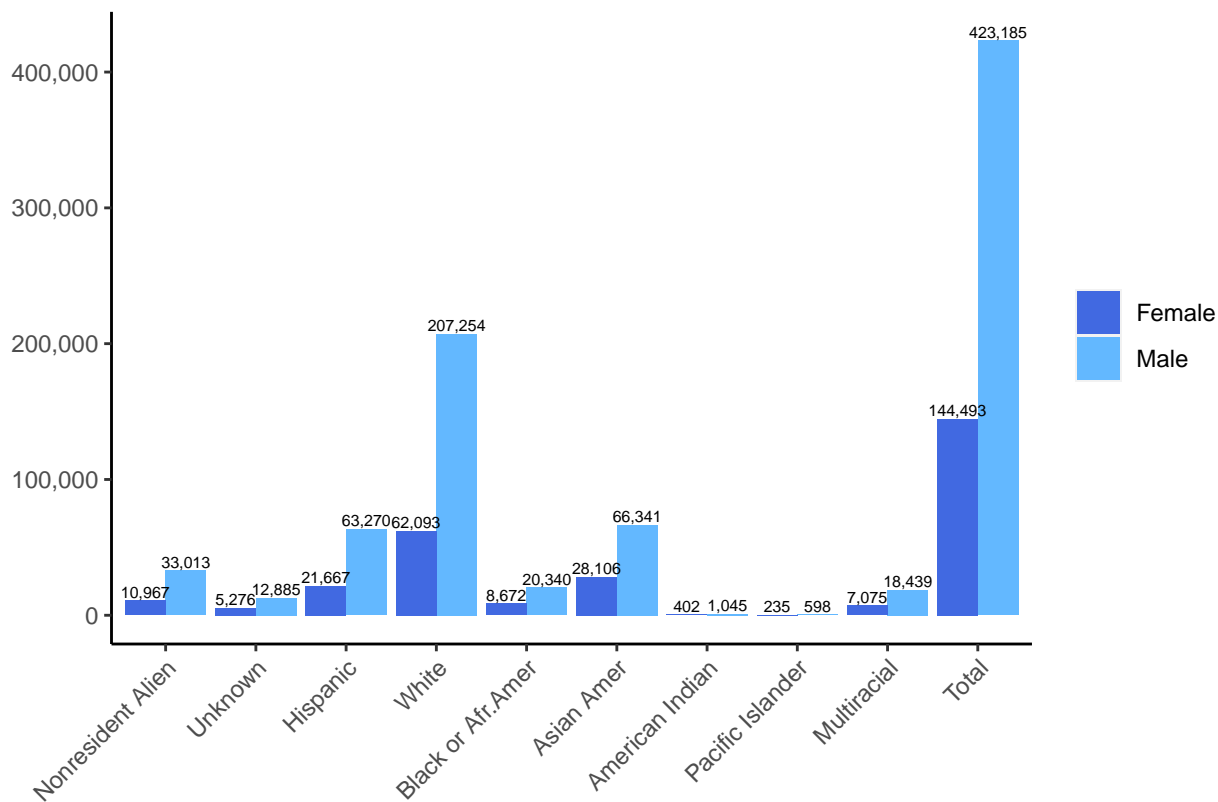
1.2.2 Engineering Undergraduate Enrollment by Institutions

Table 30: Top 50 Engineering Undergraduate Enrollment by Institutions

No	Institutions	Enrollment
1	Texas A&M University	16,428
2	Arizona State University	16,151
3	University of Central Florida	11,526
4	Purdue University	11,142
5	University of Illinois at Urbana-Champaign	10,309
6	Virginia Polytechnic Institute and State University	9,455
7	Oregon State University	9,311
8	The Pennsylvania State University	8,596

Table 30: Top 50 Engineering Undergraduate Enrollment by Institutions *(continued)*

No	Institutions	Enrollment
9	North Carolina State University	7,792
10	The Ohio State University	7,780
11	Georgia Institute of Technology	7,748
12	George Mason University	7,311
13	University of Florida	7,112
14	University of Michigan	6,946
15	Iowa State University	6,926
16	Florida International University	6,890
17	The University of Texas at Dallas	6,792
18	California Polytechnic State University, San Luis Obispo	6,458
19	The University of Texas at Austin	6,143
20	University of California, San Diego	5,986
21	Michigan State University	5,946
22	Louisiana State University	5,606
23	California State Polytechnic University, Pomona	5,567
24	University of South Florida	5,494
25	University of Colorado Boulder	5,421
26	University of Washington in Seattle	5,410
27	Clemson University	5,277
28	Colorado School of Mines	5,109
29	Auburn University	5,068
30	University of Utah	5,011
31	California State University, Long Beach	4,982
32	University of Wisconsin-Madison	4,898
33	University of Minnesota -Twin Cities	4,837
34	The University of Alabama	4,768
35	Missouri University of Science and Technology	4,696
36	University of California-Santa Cruz	4,684
37	University of Puerto Rico, Mayaguez Campus	4,666
38	University of Cincinnati	4,654
39	Texas Tech University	4,593
40	University at Buffalo, SUNY	4,569
41	University of California, Berkeley	4,541
42	Kennesaw State University	4,450
43	University of Illinois at Chicago	4,404
44	California State University, Northridge	4,397
45	California State University, Sacramento	4,350
46	San Jose State University	4,278
47	Cornell University	4,098
48	University of Nevada, Las Vegas	4,063
49	University of Maryland, Baltimore County	4,056
50	The University of Texas at Arlington	4,003

[*] Enrollment is full time plus part time students.

[*] Some Institutions do not permit formal enrollment in their engineering colleges until the second or third year.

1.2.3 Undergraduate Enrollment by Engineering Discipline

Table 31: Undergraduate Enrollment by Engineering Discipline: 571,219

Discipline Name	Enrollments
Mechanical	112,032
Computer Sci. (inside Eng.)	108,876
Computer Sci. (outside Engr.)	49,601
Other	49,432
Civil	42,848
Electrical	39,639
Biomedical	37,164
Computer	31,676
Chemical	29,787
Aerospace	26,656
Engineering (General)	25,172
Industrial/Manufacturing/Systems	18,486
Electrical/Computer	16,795
Metallurgical and Matrls.	6,015
Civil/Environmental	5,880
Envr. Eng	5,868
Biological and Agricultural	4,425
Architectural	3,461
Engr. Science and Engr. Physics	1,742
Engineering Management	1,680
Nuclear	1,620
Petroleum	1,555
Mining	410

[*] Total does not include Computer Science (outside engineering)

[*] Enrollment is for full time Bachelor's degree candidates in engineering.

Undergraduate Enrollment by Engineering Discipline
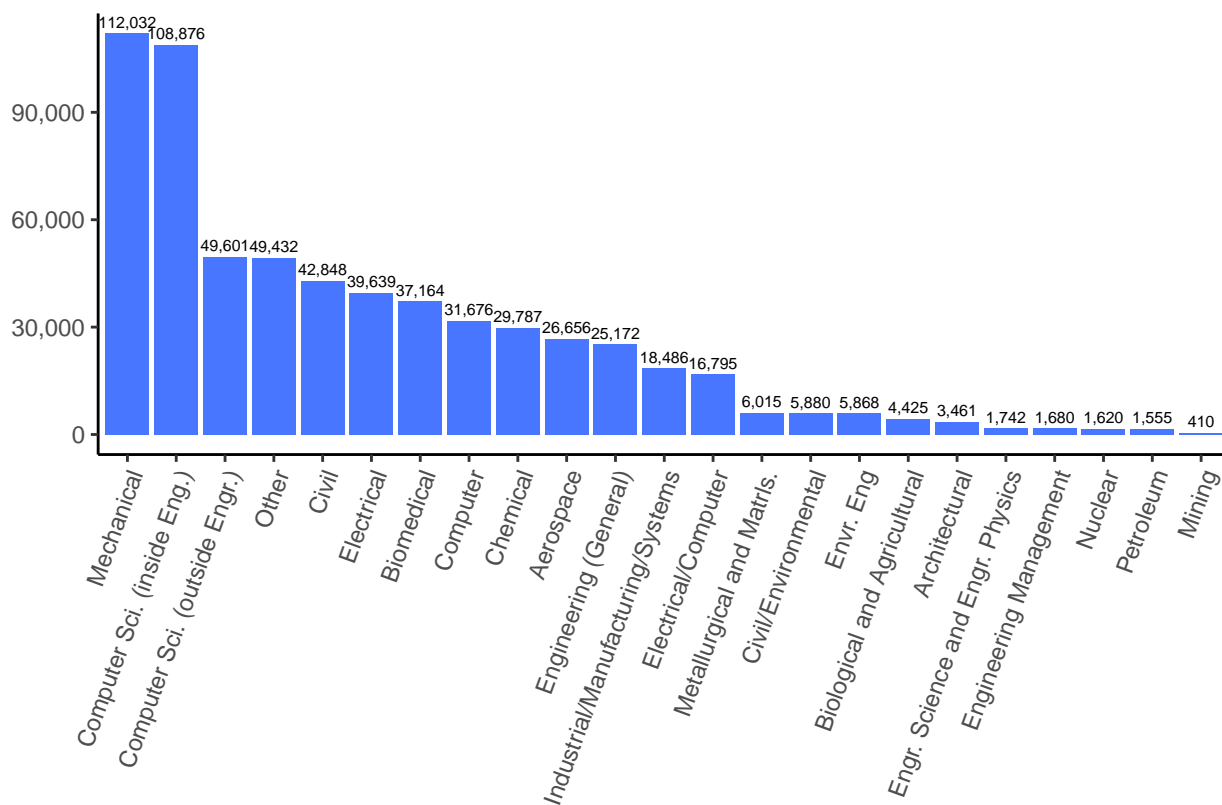
1.2.4 Undergraduate Enrollment by Engineering Discipline:(Full time and Part time)

Table 32: Undergraduate Enrollment by Engineering Discipline:(Full time and Part time)

Discipline Name	Full Time	Part Time
Aerospace	26,656	1,730
Architectural	3,461	159
Biological and Agricultural	4,425	203
Biomedical	37,164	2,027
Chemical	29,787	2,163
Civil	42,848	4,931
Civil/Environmental	5,880	1,406
Computer	31,676	3,367
Computer Sci. (inside Eng.)	108,876	15,937
Electrical	39,639	6,537
Electrical/Computer	16,795	1,219
Engineering (General)	25,172	2,404
Engineering Management	1,680	108
Engr. Science and Engr. Physics	1,742	50
Envr. Eng	5,868	381
Industrial/Manufacturing/Systems	18,486	2,117
Mechanical	112,032	12,854
Metallurgical and Matrls.	6,015	1,689
Mining	410	29
Nuclear	1,620	102
Other	49,432	4,215
Petroleum	1,555	156

1.2.5 Undergraduate Enrollment by Gender

Table 33: Undergraduate Enrollment by Gender

Gender	Percentage
Female	24.6%
Male	75.4%

Undergraduate Enrollment by Gender
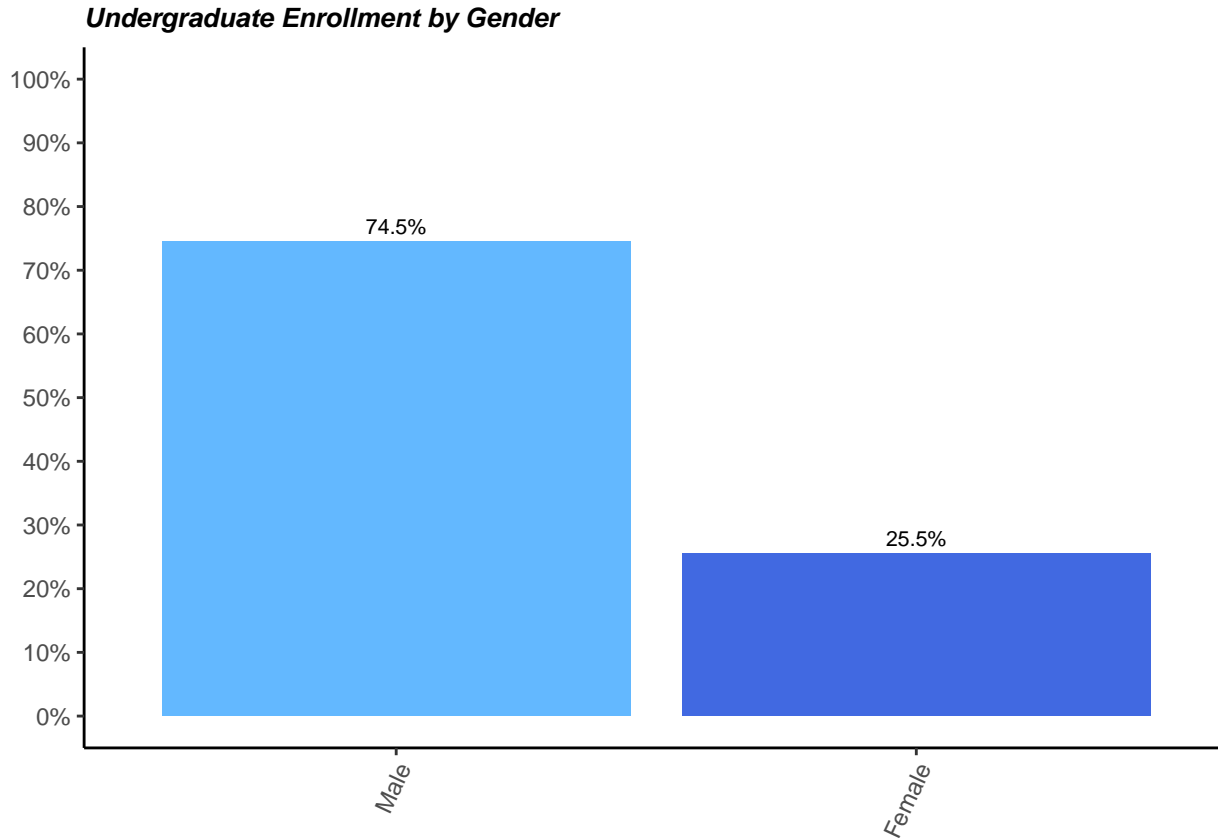
1.2.6 Undergraduate Enrollment by Race and Ethnicity

Table 34: Undergraduate Enrollment by Race and Ethnicity*

Ethnicity	Percentage
Black or Afr. American	5.4%
Hispanic	15.8%
Other	5%
Asian American	16.1%
White	53.4%
Unknown	4.2%

Undergraduate Enrollment by Race and Ethnicity
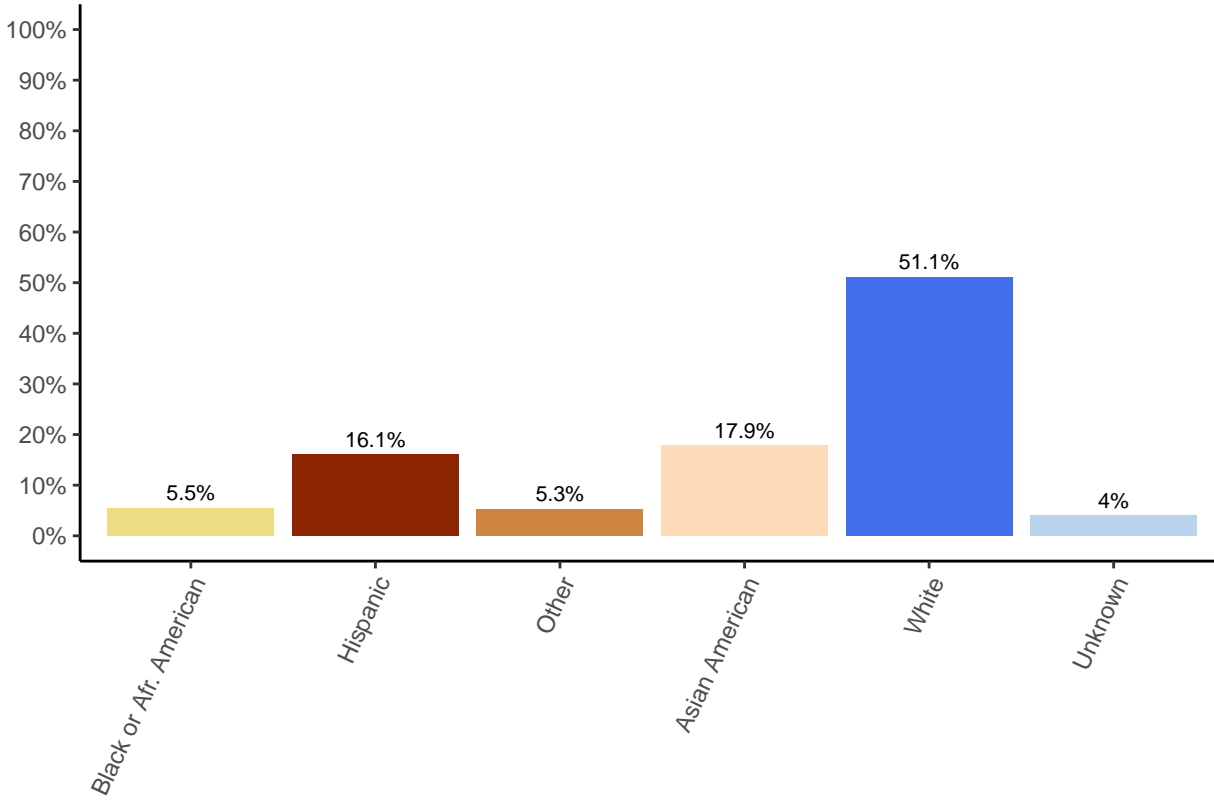
1.2.7 Undergraduate Enrollment by Residency

Table 35: Undergraduate Enrollment by Residency

Nationality	Percentage
Domestic	92.1%
Foreign	7.9%

Undergraduate Enrollment by Residency
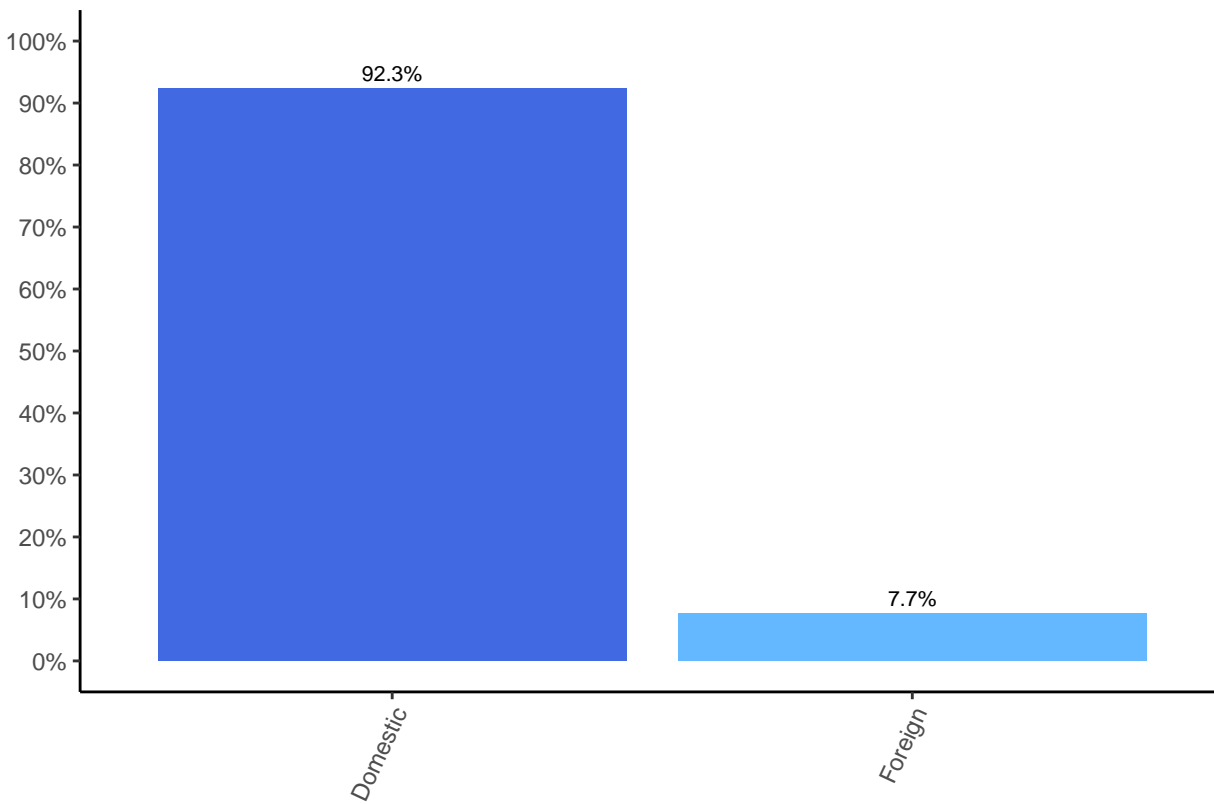
2 ENGINEERING MASTER'S

2.1 ENGINEERING MASTER'S DEGREE

2.1.1 Master's Degrees Awarded by Engineering Discipline

Table 36: Master's Degrees by discipline: 54,438

Discipline Name	Degrees Awarded
Computer Sci. (inside Eng.)	10,270
Other	7,313
Mechanical	6,664
Computer Sci. (outside Engr.)	5,756
Electrical/Computer	4,321
Civil	3,656
Electrical	3,620
Industrial/Manufacturing/Systems	3,444
Biomedical	2,971
Engineering Management	2,621
Computer	1,640
Aerospace	1,561
Chemical	1,531
Engineering (General)	1,304
Civil/Environmental	1,055
Metallurgical and Matrls.	1,047
Envr. Eng	372
Petroleum	238
Nuclear	217
Biological and Agricultural	192
Engr. Science and Engr. Physics	187
Architectural	146
Mining	68

* Total does not include computer science (outside engineering).

Master's Degrees Awarded by Engineering Discipline

25
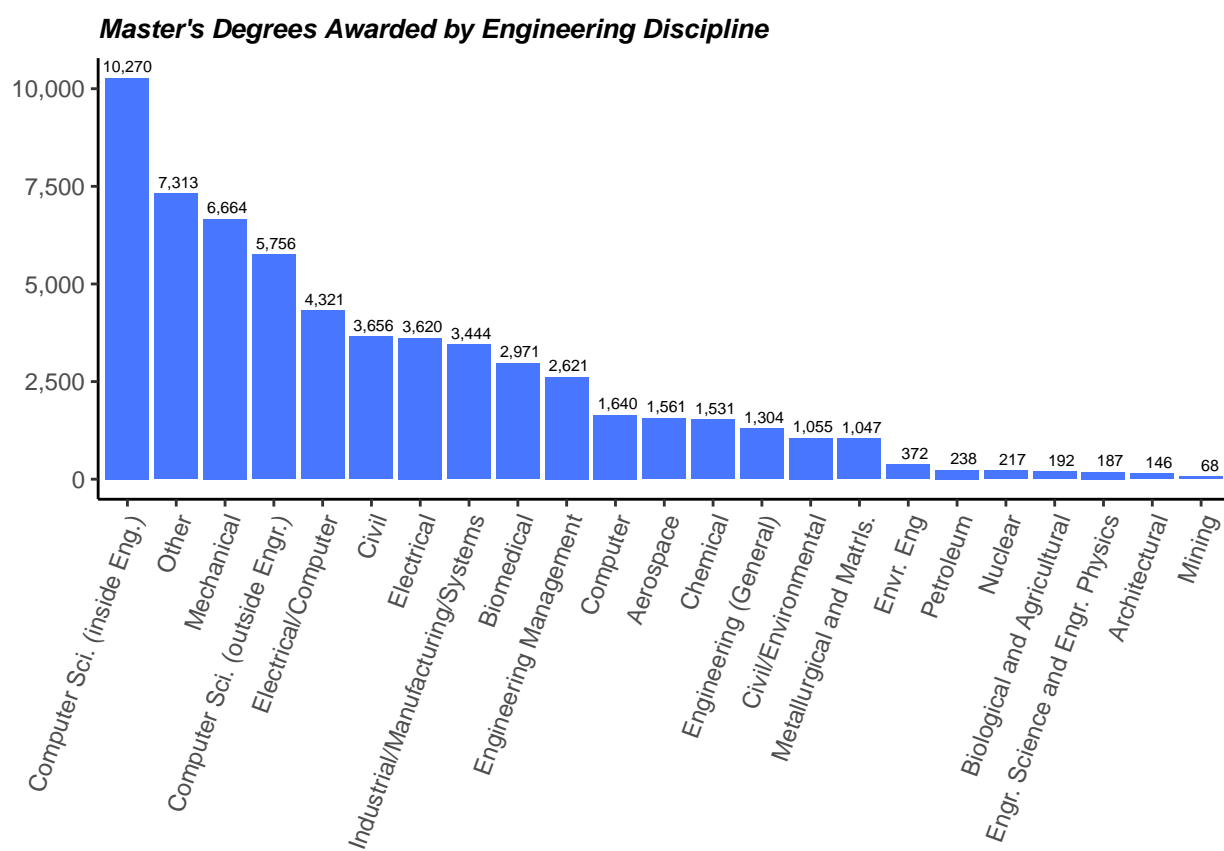
2.1.2 Total Master's Degrees Awarded to Underrepresented Minorities by Engineering Discipline

Table 37: Master's Degrees Awarded to Underrepresented Minorities by Engineering Discipline: 5,027

Discipline Name	Degrees Awarded
Mechanical	704
Other	691
Computer Sci. (inside Eng.)	586
Civil	465
Industrial/Manufacturing/Systems	368
Biomedical	336
Engineering Management	330
Computer Sci. (outside Engr.)	315
Electrical	284
Electrical/Computer	259
Aerospace	187
Engineering (General)	175
Chemical	165
Civil/Environmental	133
Computer	100
Metallurgical and Matrls.	95
Envr. Eng	51
Petroleum	33
Nuclear	24
Biological and Agricultural	20
Engr. Science and Engr. Physics	12
Mining	5
Architectural	4

* Total does not include computer science (outside engineering).

2.1.3 Percentage of Master's Degrees Awarded to Underrepresented Minorities by Discipline

Table 38: Percentage of Master's Degrees Awarded to Underrepresented Minorities by Discipline 8.8 % of Total

Discipline Name	Percent Women
Petroleum	13.9%
Envr. Eng	13.7%
Engineering (General)	13.4%
Civil	12.7%
Civil/Environmental	12.6%
Engineering Management	12.6%
Aerospace	12%
Biomedical	11.3%
Nuclear	11.1%
Chemical	10.8%
Industrial/Manufacturing/Systems	10.7%
Mechanical	10.6%
Biological and Agricultural	10.4%
Other	9.4%
Metallurgical and Matrls.	9.1%
Electrical	7.8%
Mining	7.4%
Engr. Science and Engr. Physics	6.4%
Computer	6.1%
Electrical/Computer	6%
Computer Sci. (inside Eng.)	5.7%
Computer Sci. (outside Engr.)	5.5%
Architectural	2.7%

2.1.4 Percentage of Master's Degrees Awarded to Women by Discipline

Table 39: Percentage of Master's Degrees Awarded to Women by Discipline 29.5 % of Total

Discipline Name	Percent Women
Envr. Eng	57.3%
Biomedical	49.5%
Biological and Agricultural	46.9%
Civil/Environmental	43.7%
Architectural	39.7%
Chemical	39.3%
Metallurgical and Matrls.	35.1%
Industrial/Manufacturing/Systems	34.3%
Other	33.1%
Engineering Management	33%

Table 39: Percentage of Master's Degrees Awarded to Women by Discipline 29.5 % of Total *(continued)*

Discipline Name	Percent Women
Computer Sci. (outside Engr.)	32.6%
Civil	32%
Engineering (General)	28.1%
Computer Sci. (inside Eng.)	27.6%
Mining	25%
Computer	23.6%
Electrical/Computer	22.7%
Nuclear	20.7%
Electrical	20.6%
Mechanical	18.9%
Aerospace	17.3%
Engr. Science and Engr. Physics	16.6%
Petroleum	15.5%

Percentage of Master's Degrees Awarded to Women by Discipline
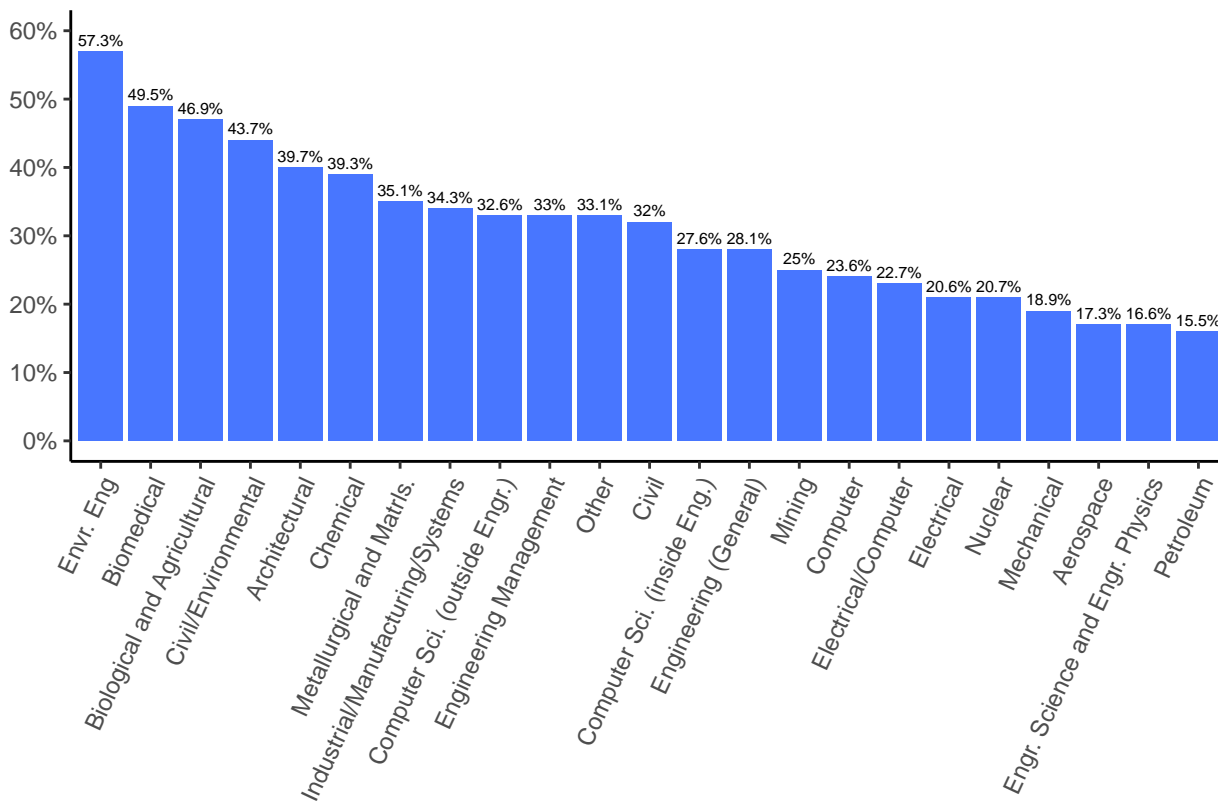
2.1.5   Master's Degrees Awarded by Gender

Table 40: Master's Degrees Awarded by Gender

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Female	23.00%	22.60%	22.60%	23.10%	23.90%	24.20%	25.40%	25.70%	26.70%	27.30%	28.10%	29.00%	29.90%
Male	77.00%	77.40%	81.60%	76.90%	76.10%	75.80%	74.60%	74.30%	73.30%	72.70%	71.90%	71.00%	70.10%

Master's Degrees Awarded by Gender
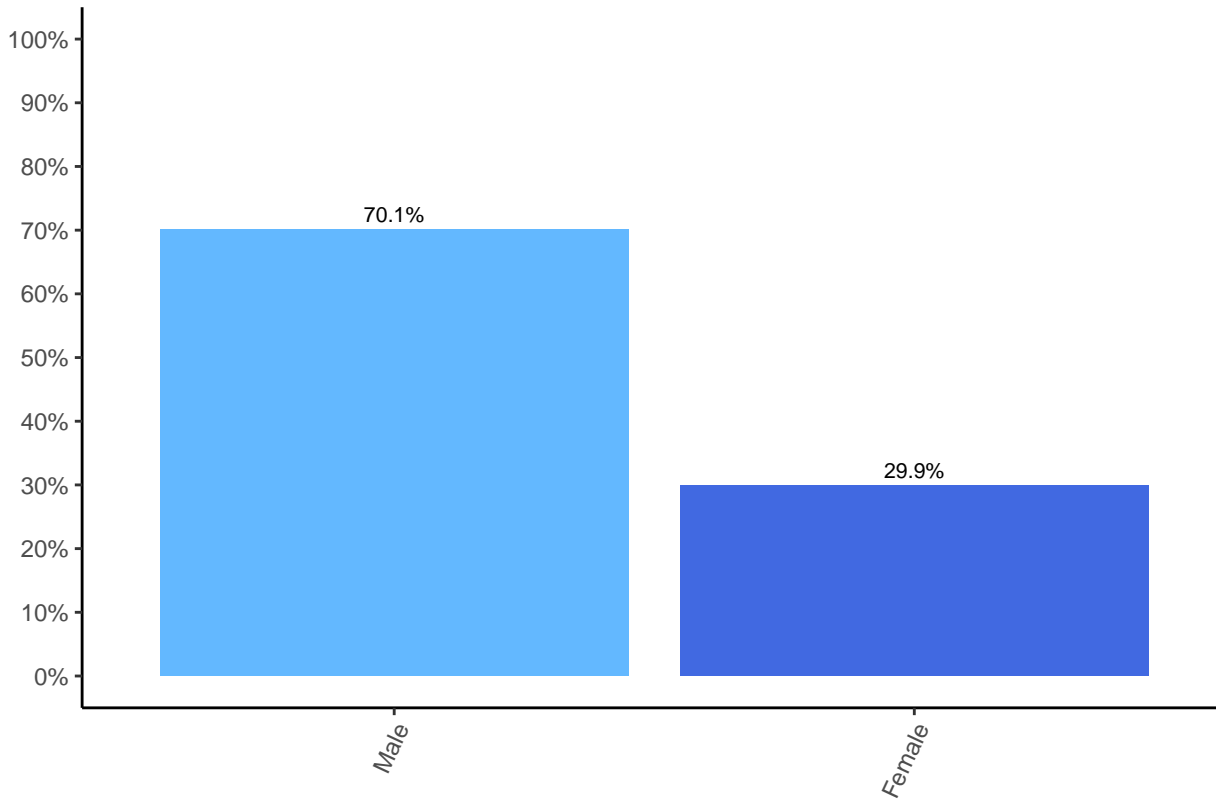
2.1.6 Master's Degrees Awarded by Race and Ethnicity

Table 41: Master's Degrees Awarded by Ethnicity

Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Black or Afr. American	4.7%	5.1%	4.9%	4.7%	4.7%	4.4%	4.7%	4.7%	4.8%	4.8%	5.0%	5.0%
Hispanic	5.3%	6.0%	6.3%	7.3%	7.6%	7.7%	8.3%	8.5%	8.8%	9.2%	9.4%	9.4%
Other	17.4%	1.4%	1.5%	2.0%	2.2%	2.6%	3.0%	3.1%	3.8%	3.9%	3.6%	3.6%
Asian American	15.1%	14.9%	15.5%	14.5%	15.0%	14.5%	15.1%	15.1%	15.8%	16.3%	15.8%	16.8%
White	57.5%	60.9%	58.2%	59.7%	59.5%	60.2%	59.5%	60.1%	58.2%	55.4%	55.2%	54.5%
Unknown	0%	11.7%	13.6%	11.8%	11.0%	10.6%	9.4%	8.4%	8.6%	10.4%	10.9%	10.7%

*Data on ethnicity does not include foreign nationals. American Indian/Alaska Native (0.3%), Native Hawaiian/Other Pacific Islander(0.1%) and Multiracial (3.6%) are combined under Other.

Master's Degrees Awarded by Race and Ethnicity
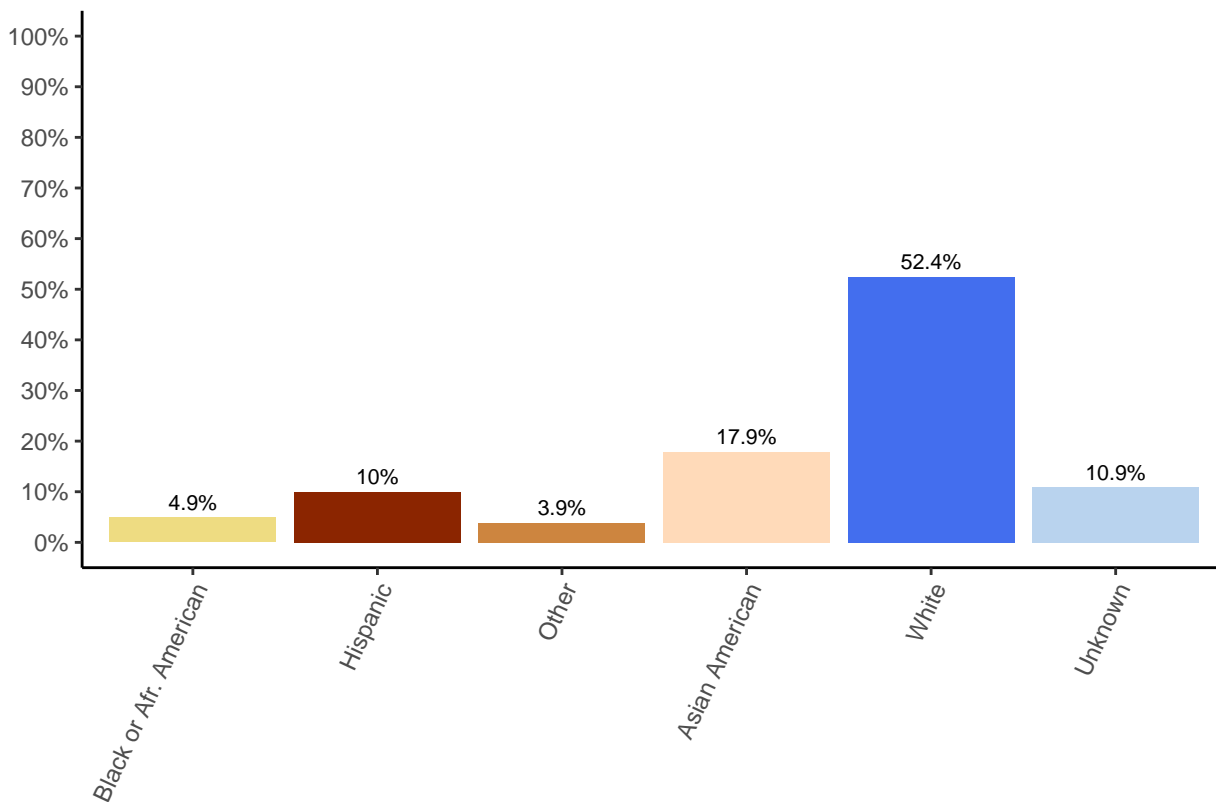
2.1.7 Master's Degrees Awarded by Residency

Table 42: Master's Degrees Awarded by Residency

Nationality	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Foreign	46.1%	44.4%	43.3%	45.3%	47.5%	52.6%	58.1%	59.2%	57.1%	53.6%	53.2%	51.7%
Domestic	53.9%	55.6%	56.7%	54.7%	52.5%	47.4%	41.9%	40.8%	42.9%	46.4%	46.8%	48.3%

Master's Degrees Awarded by Residency
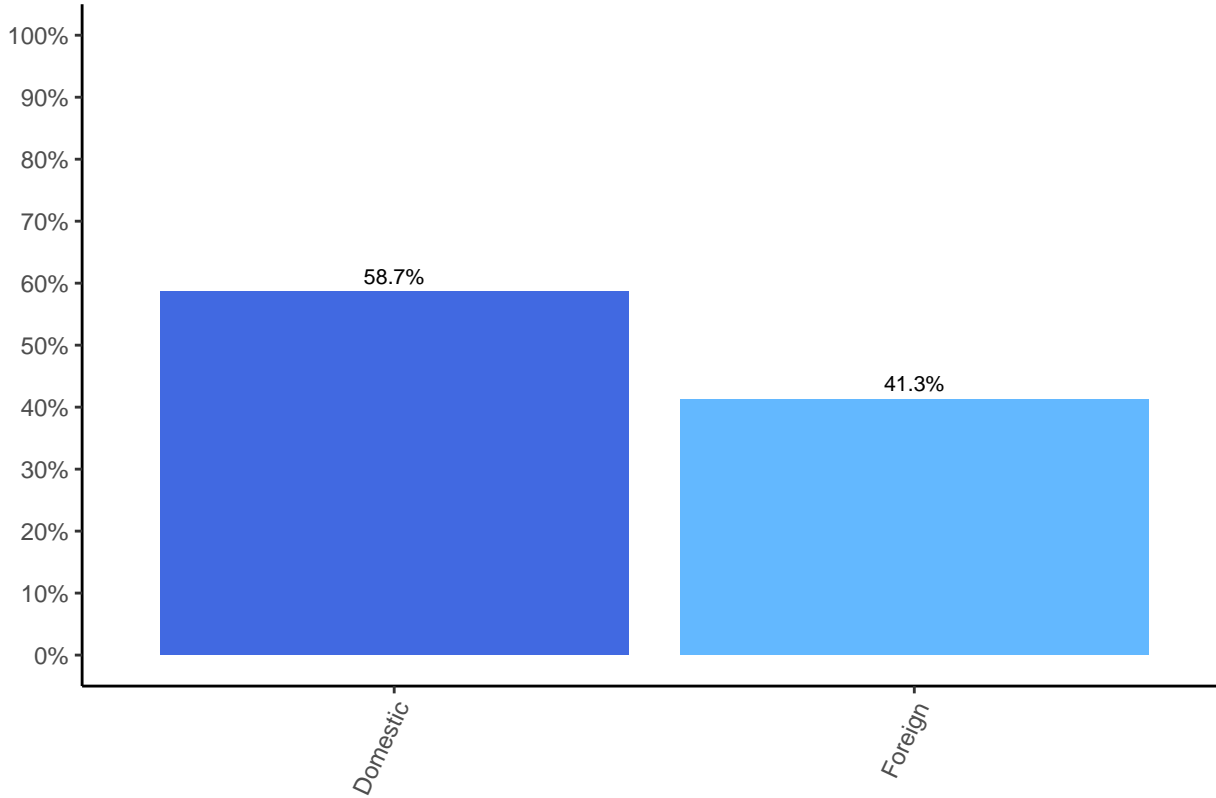
2.1.8 Master's Degrees Awarded by Race, Ethnicity, and Gender

Table 43: Master's Degrees Awarded by Race, Ethnicity, and Gender 54,438*

Ethnicity	Degrees Awarded
Nonresident Alien Male	14,866
Nonresident Alien Female	6,480
Unknown Male	1,880
Unknown Female	1,001
Hispanic Male	2,339
Hispanic Female	958
White Male	12,793
White Female	4,533
Black or Afr. American Male	1,064
Black or Afr. American Female	541
Asian American Male	3,963
Asian American Female	1,950
American Indian Male	60
American Indian Female	29
Native Hawaiian/Other Pacific Islander Male	25
Native Hawaiian/Other Pacific Islander Female	4
Multiracial Male	811
Multiracial Female	370
Total Male	37,801
Total Female	15,866

* Total degree includes 11 total Non binary graduates and 765 total Other Gender graduates.

* Includes 32 male and 13 female graduates from Puerto Rico.

Master's Degrees Awarded by Race, Ethnicity, and Gender
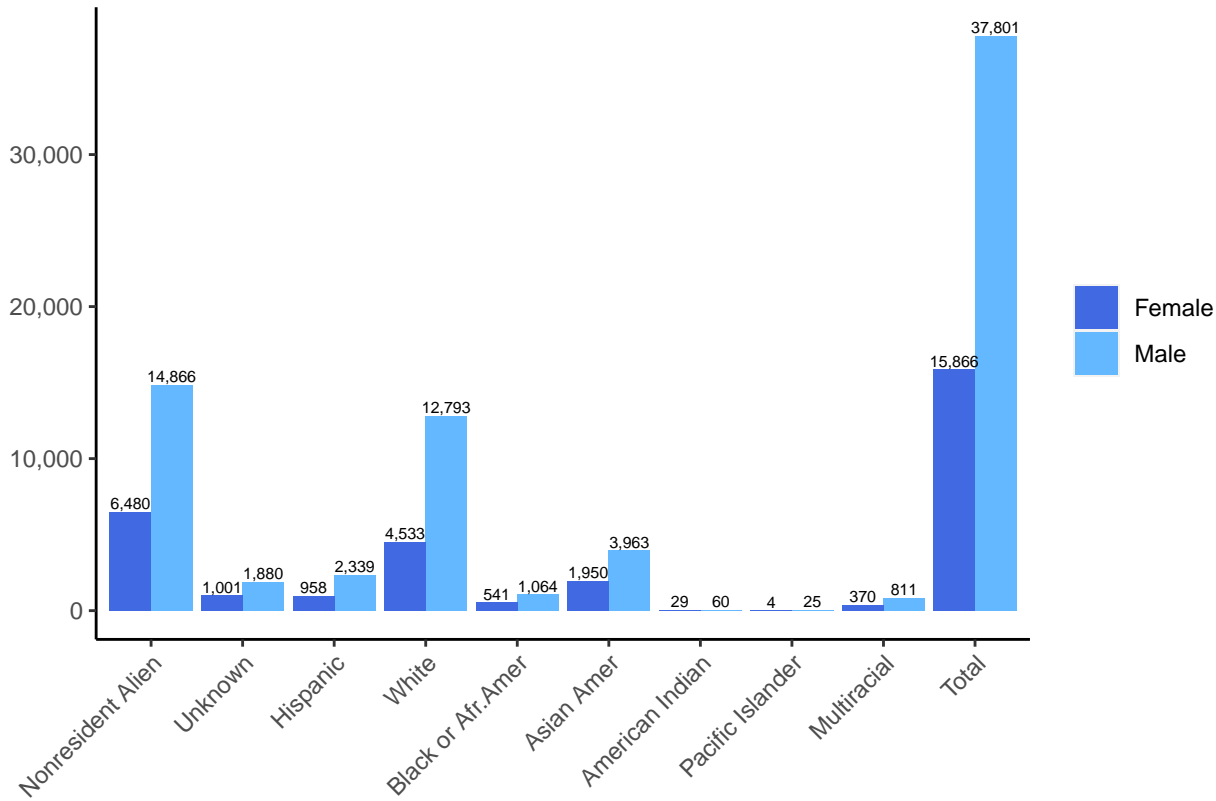
2.1.9 Top 50 Institutions Awarding Engineering Master's Degrees

Table 44: Top 50 Institutions Awarding Engineering Master's Degrees

No	Institutions	Degrees Awarded
1	Northeastern University	2,473
2	University of Southern California	1,982
3	Fu Foundation School of Engineering and Applied Science - Columbia University	1,586
4	Georgia Institute of Technology	1,480
5	Carnegie Mellon University	1,415
6	Arizona State University	1,250
7	Cornell University	1,208
8	University of California, Berkeley	1,168
9	University of Illinois at Urbana-Champaign	1,155
10	University of Michigan	1,150
11	NYU Tandon School of Engineering	1,046
12	Stanford University	1,004
13	University of Pennsylvania	943
14	Massachusetts Institute of Technology	803
15	University of California, San Diego	773
16	University at Buffalo, SUNY	730
17	San Jose State University	723
18	Stevens Institute of Technology	714
19	Texas A&M University	694
20	Northwestern University	691
21	The Johns Hopkins University	635
22	University of California, Los Angeles	630
23	University of Florida	618
24	New Jersey Institute of Technology	593
25	University of Colorado Boulder	589
26	The University of Texas at Arlington	559
27	North Carolina State University	532
28	The University of Texas at Dallas	526
29	George Mason University	502
30	Purdue University	499
31	Illinois Institute of Technology	489
31	The George Washington University	489
33	Virginia Polytechnic Institute and State University	476
34	University of Wisconsin-Madison	469
35	University of California, Irvine	464
36	The University of Texas at Austin	457
37	University of Central Florida	449
38	Worcester Polytechnic Institute	426
39	The Pennsylvania State University	423
40	University of Maryland, Baltimore County	414
41	Washington University in St. Louis	410
42	Boston University	389
43	Rochester Institute of Technology	386
44	Duke University	378
44	Stony Brook University	378
46	University of Maryland, College Park	370

Table 44: Top 50 Institutions Awarding Engineering Master's Degr
(continued)

No	Institutions	Degrees Awarded
47	Rutgers, The State University of New Jersey, School of Engineering	364
48	University of Minnesota -Twin Cities	357
49	University of Michigan-Dearborn	354
50	Florida International University	353

* 313 Institutions included

2.1.10 Top 20 Institutions by Total Master's Degrees awarded to Underrepresented Minorities

Table 45: Top 20 Institutions by Total Master's Degrees awarded
to Underrepresented Minorities

No	Institutions	Degrees Awarded
1	The University of Texas at El Paso	194
2	Florida International University	178
3	University of Central Florida	117
4	Stanford University	115
5	Georgia Institute of Technology	113
6	University of Southern California	111
7	Arizona State University	99
8	University of Florida	95
9	Cornell University	93
10	New Jersey Institute of Technology	92
11	University of Michigan	77
12	NYU Tandon School of Engineering	76
13	University of Maryland, Baltimore County	75
14	Carnegie Mellon University	69
14	The University of Texas Rio Grande Valley	69
16	Texas A&M University	68
16	The George Washington University	68
18	University of California, San Diego	66
19	University of California, Berkeley	65
20	Massachusetts Institute of Technology	60

* 313 Institutions included

2.1.11 Top 50 Institutions by Percentage of Master's Degrees awarded to Underrepresented Minorities

Table 46: Top 50 Institutions by Percentage of Master's Degrees
awarded to Underrepresented Minorities

No	Institutions	Percent Underrepresented Minorities
1	University of Puerto Rico, Mayaguez Campus	100%
1	Virginia State University	100%
3	Texas Southern University	85.7%
4	Morgan State University	74.3%
5	Alabama A & M University	73.5%
6	The University of Texas Rio Grande Valley	67.6%
7	The University of Texas at El Paso	65.3%
8	North Carolina A&T State University	59.7%
9	Southern University and A & M College	51.5%
10	Florida International University	50.4%
11	Capitol Technology University	50%
11	Howard University	50%
11	Jackson State University	50%
11	United States Merchant Marine Academy	50%
11	University of South Dakota	50%
16	Prairie View A & M University	47.8%
17	Norwich University	40%
17	St. Mary's University	40%
19	Loyola Marymount University	38.7%
20	University of the District of Columbia	36.4%
21	The University of Texas at San Antonio	35.5%
22	Florida Polytechnic University	33.3%
22	Tuskegee University	33.3%
22	University of San Diego	33.3%
22	University of Texas of the Permian Basin	33.3%
26	The University of New Mexico	31.9%
27	City College of the City University of New York	31%
28	New Mexico State University	30.6%
29	California State Polytechnic University, Pomona	29.6%
30	New Mexico Institute of Mining and Technology	29%
31	University of Alaska Anchorage	28.6%
32	University of Miami	28.4%
33	Kennesaw State University	26.5%
34	Tennessee State University	26.1%
35	University of Central Florida	26.1%
36	California State University, Northridge	25.6%
37	Gonzaga University	25%
38	University of Alabama at Birmingham	23.3%
39	Christian Brothers University	22.7%

Table 46: Top 50 Institutions by Percentage of Master's Degrees
awarded to Underrepresented Minorities *(continued)*

No	Institutions	Percent Underrepresented Minorities
40	Oklahoma Christian University	22.4%
41	University of Arizona	22%
42	FAMU-FSU College of Engineering	21.6%
43	Oregon Institute of Technology	20.8%
44	University of Southern Mississippi	20%
44	Widener University	20%
46	University of Nevada, Las Vegas	19.4%
47	Hofstra University	18.4%
48	Florida Atlantic University	18.2%
48	Texas Tech University	18.2%
50	University of Maryland, Baltimore County	18.1%

* 313 Institutions included

2.1.12 Top 20 Institutions Awarding Highest Percentage of Master's Degrees to Women

Table 47: Top 20 Highest Percentage of Master's Degrees to Women

No	Institutions	Percent Women
1	Virginia State University	100%
2	University of Portland	75%
3	SUNY College of Environmental Science and Forestry	71.4%
4	Alabama A & M University	58.8%
5	Boise State University	58.1%
6	California State University-East Bay	57.6%
7	Texas Southern University	57.1%
8	Eastern Michigan University	55.6%
9	Loyola Marymount University	51.6%
10	Texas State University	51.5%
11	Lipscomb University	50%
11	Mississippi College	50%
11	State University of New York at New Paltz	50%
11	Thomas Jefferson University	50%
11	University of Arkansas at Little Rock	50%
11	University of South Dakota	50%
11	Wentworth Institute of Technology	50%
18	University of Central Missouri	48.4%
19	North Carolina A&T State University	46.8%
20	Harvard University	46.2%

* 313 included

2.1.13 Top 20 Institutions by Total Master's Degrees awarded in Engineering (General)

Table 48: Top 20 Institutions by Total Master's Degrees awarded
in Engineering (General)

No	Institutions	Degrees Awarded
1	University at Buffalo, SUNY	176
2	University of California, Los Angeles	169
3	Arizona State University	108
4	Oklahoma Christian University	60
4	Rowan University	60
4	University of Massachusetts Lowell	60
7	Brown University	56
8	San Jose State University	53
9	Lamar University	39
10	University of Colorado Colorado Springs	34
11	Saint Louis University	33
12	University of the Pacific	32
13	Morgan State University	31
13	Texas State University	31
15	San Francisco State University	29
16	Purdue University Fort Wayne	22
17	The University of Tennessee-Chattanooga	21
18	California State Polytechnic University, Pomona	17
18	California State University-Fresno	17
20	Marshall University	16

* 61 Institutions included

2.2 ENGINEERING MASTER'S ENROLLMENT

2.2.1 Master's Enrollment by Race, Ethnicity, and Gender

Table 49: Master's Enrollment Awarded by Race, Ethnicity, and Gender 108,116*

Ethnicity	Enrollments
Nonresident Alien Male	48,527
Nonresident Alien Female	21,682
Unknown Male	4,029
Unknown Female	2,334
Hispanic Male	2,624
Hispanic Female	1,085
White Male	11,802
White Female	4,226
Black or Afr. American Male	1,031
Black or Afr. American Female	524
Asian American Male	4,485
Asian American Female	2,287
American Indian Male	92
American Indian Female	42
Native Hawaiian/Other Pacific Islander Male	21
Native Hawaiian/Other Pacific Islander Female	9
Multiracial Male	2,129
Multiracial Female	1,024
Total Male	74,740
Total Female	33,213

* Total Enrollment includes is for full time students
* Includes 92 male and 44 female.

Master's Enrollment by Race, Ethnicity, and Gender
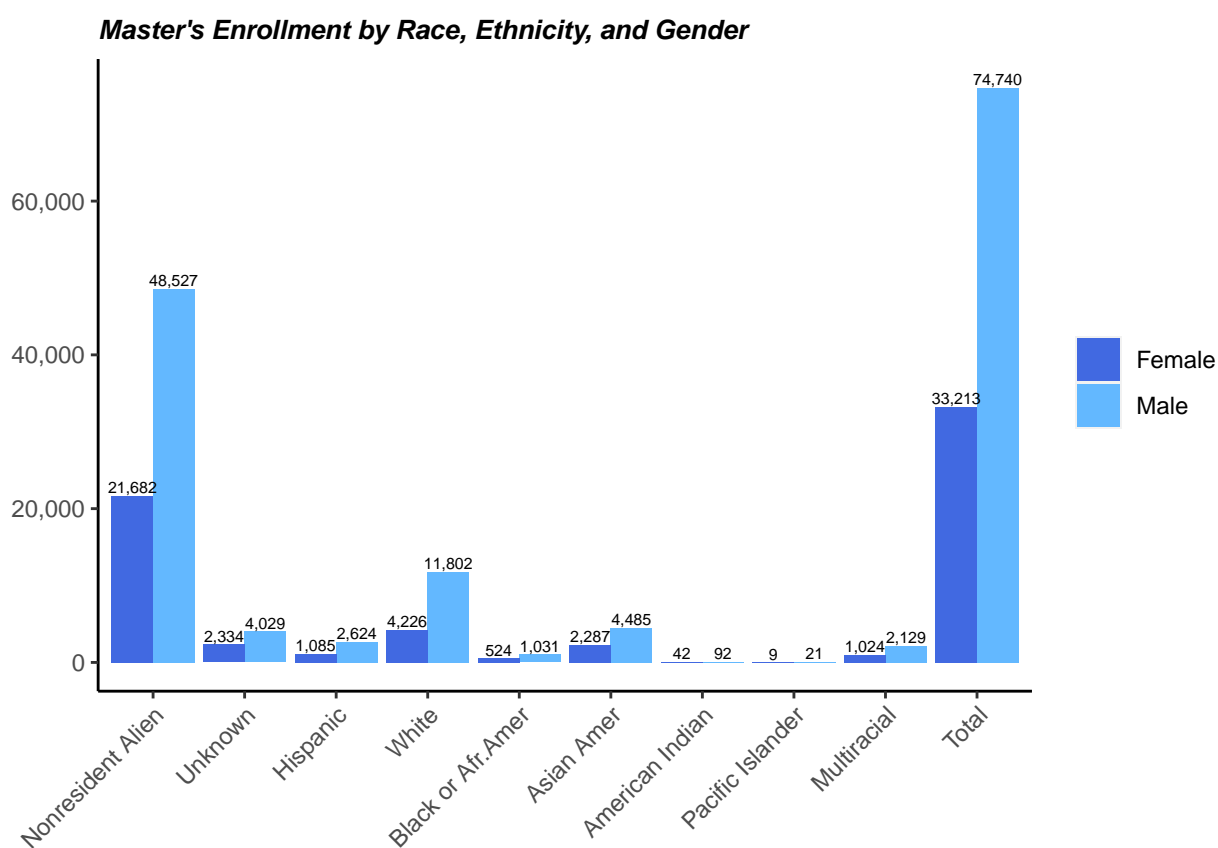
2.2.2 Top 50 Institutions with Highest Graduate Enrollment

Table 50: Top 50 Institutions with Highest Graduate Enrollment*

No	Institutions	Enrollment
1	University of Southern California	7,187
2	Arizona State University	6,845
3	Northeastern University	6,252
4	University of Illinois at Urbana-Champaign	5,866
5	Columbia University	5,431
6	Georgia Institute of Technology	5,046
7	Fu Foundation School of Engineering and Applied Science - Columbia University	4,963
8	NYU Tandon School of Engineering	4,779
9	University of Pennsylvania	4,453
10	Texas A&M University	4,161
11	University of Michigan	4,138
12	North Carolina State University	3,749
13	The University of Texas at Arlington	3,703
14	Stanford University	3,689
15	University of California, San Diego	3,631
16	Massachusetts Institute of Technology	3,302

No	Institutions	Enrollment
17	University of Florida	3,296
18	Carnegie Mellon University	3,164
18	Stevens Institute of Technology	3,164
20	University at Buffalo, SUNY	3,062
21	Purdue University	3,030
22	Virginia Polytechnic Institute and State University	2,905
23	Cornell University	2,864
24	University of Washington in Seattle	2,845
25	University of California, Berkeley	2,754
26	George Mason University	2,718
27	University of Colorado Boulder	2,665
28	The Johns Hopkins University	2,611
29	The Pennsylvania State University	2,561
30	University of North Texas	2,550
31	University of California, Los Angeles	2,535
32	Northwestern University	2,436
33	The University of Texas at Dallas	2,325
34	The University of Texas at Austin	2,305
35	University of Maryland, Baltimore County	2,118
36	Duke University	2,007
37	University of Central Florida	1,989
38	University of Minnesota -Twin Cities	1,973
39	The George Washington University	1,885
40	University of Maryland, College Park	1,879
41	The Ohio State University	1,737
42	University of Wisconsin-Madison	1,666
43	Washington University in St. Louis	1,622
44	University of Houston	1,598
45	William Marsh Rice University	1,579
46	Wichita State University	1,566
47	Clemson University	1,553
48	Stony Brook University	1,551
49	University of Utah	1,454
50	Texas Tech University	1,422

* 50 Institutions reported.Includes both part time and full time.

2.2.3 Master's Enrollment by Engineering Discipline:(Full time and Part time)

Table 51: Master's Enrollment by Engineering Discipline:(Full time and Part time)

Discipline Name	Full Time	Part Time
Aerospace	2,661	1,530
Architectural	169	10
Biological and Agricultural	322	69
Biomedical	3,949	1,033
Chemical	2,058	652
Civil	5,625	2,925
Civil/Environmental	1,407	484
Computer	4,372	1,158
Computer Sci. (inside Eng.)	32,413	12,297
Electrical	6,852	3,016
Electrical/Computer	7,778	2,353
Engineering (General)	1,477	1,182
Engineering Management	4,416	3,235
Engr. Science and Engr. Physics	266	190
Envr. Eng	720	312
Industrial/Manufacturing/Systems	6,118	3,644
Mechanical	10,047	4,416
Metallurgical and Matrls.	1,427	635
Mining	74	10
Nuclear	348	141
Other	15,373	6,341
Petroleum	244	98

2.2.4 Master's Enrollment by Gender

Table 52: Master's Enrollment by Gender

Gender	Percentage
Female	29.6%
Male	70.4%

Master's Enrollment Degrees Awarded by Gender
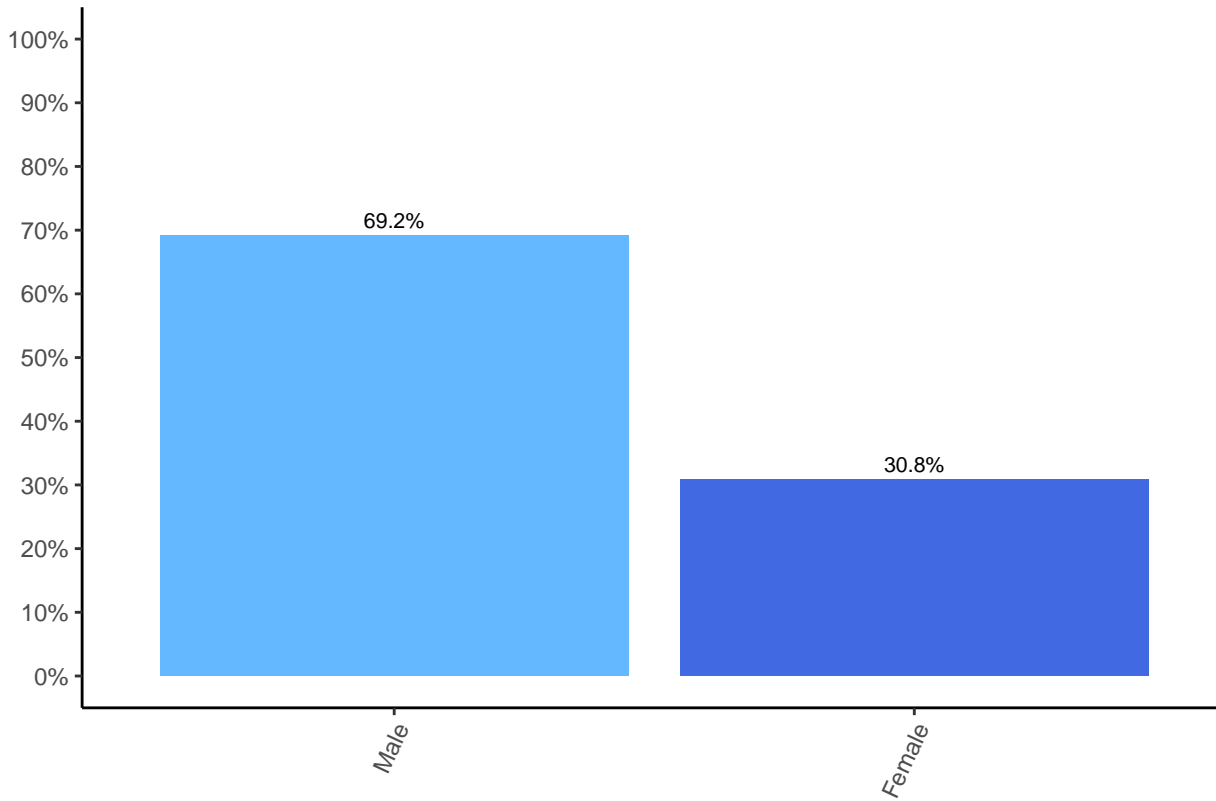
2.2.5 Master's Enrollment by Race and Ethnicity

Table 53: Master's Enrollment by Race and Ethnicity*

Ethnicity	Percentage
Black or Afr. American	4.5%
Hispanic	10.7%
Other	4.6%
Asian American	18%
White	49.7%
Unknown	12.5%

Master's Enrollment by Race and Ethnicity
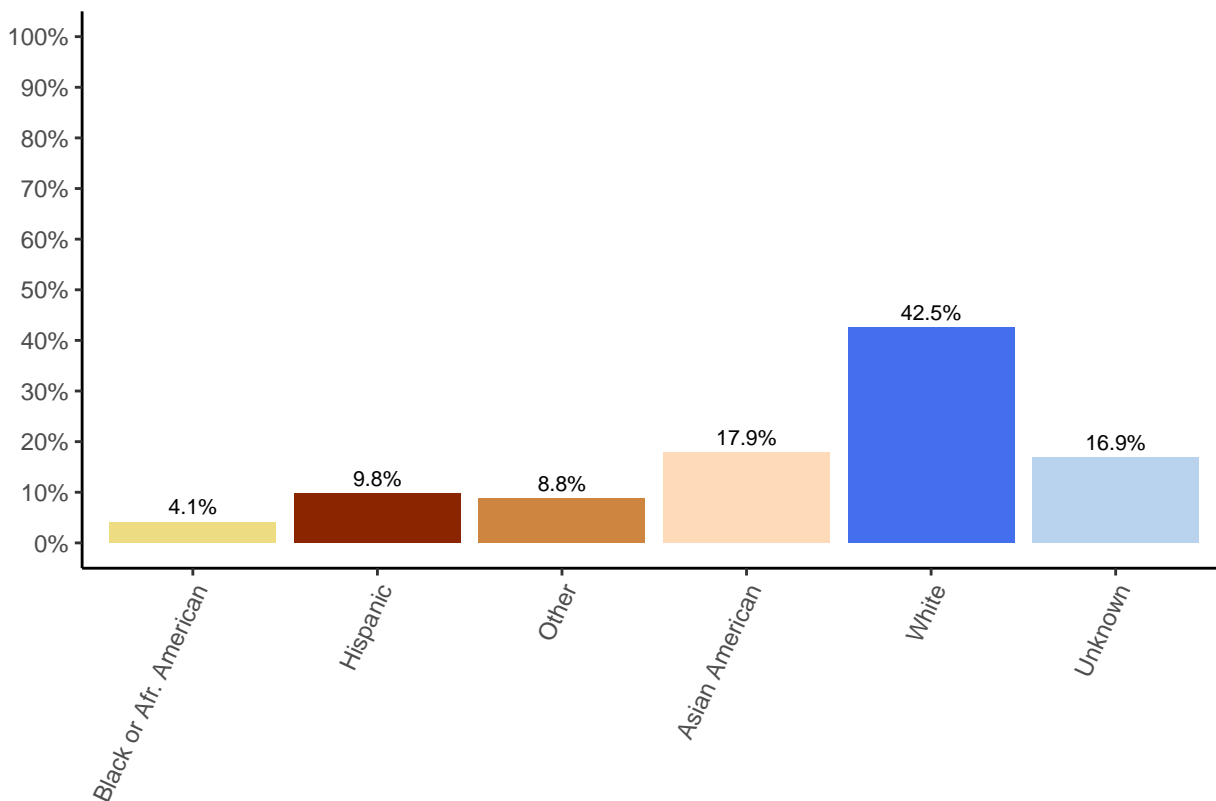
2.2.6 Master's Enrollment by Residency

Table 54: Master's Enrollment by Residency

Nationality	Percentage
Foreign	59.8%
Domestic	40.2%

Master's Enrollment by Residency
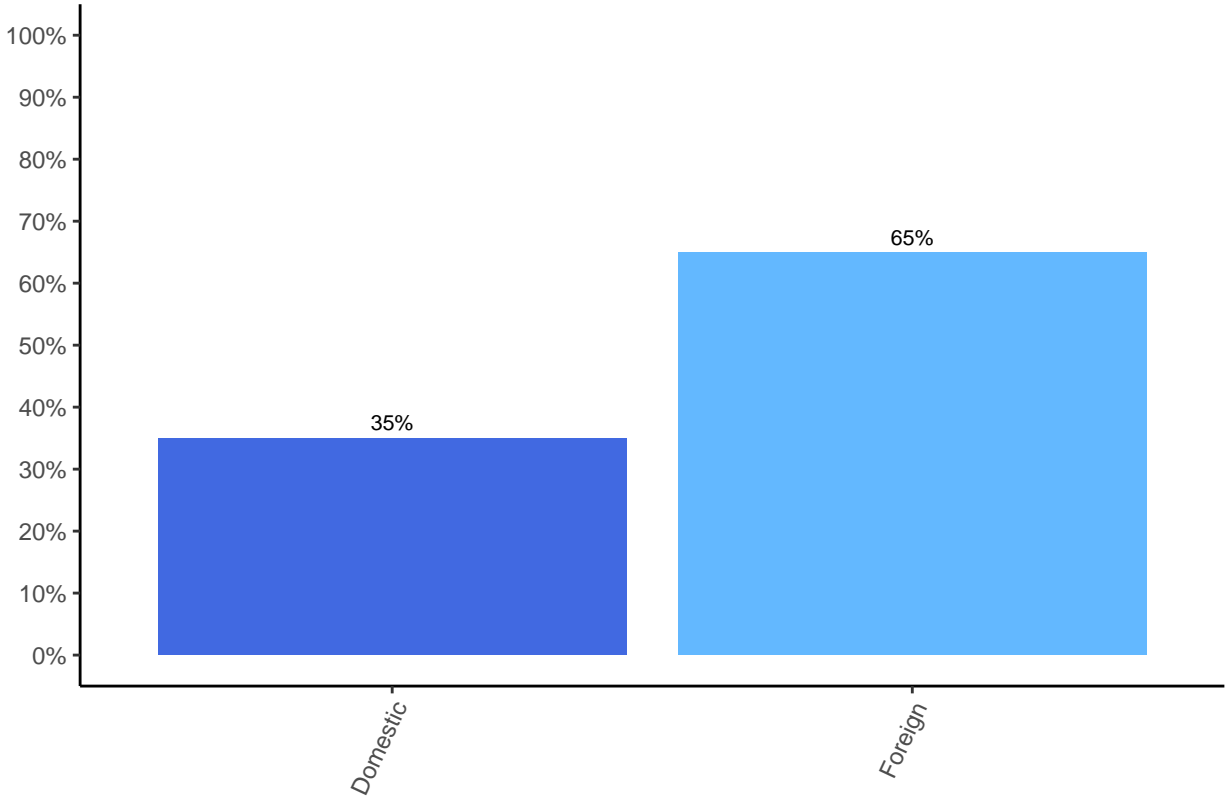
3 ENGINEERING DOCTORAL

3.1 ENGINEERING DOCTORAL DEGREES

3.1.1 Doctoral Degrees Awarded by Engineering Discipline

Table 55: Doctoral Degrees by discipline: 13,304

Discipline Name	Degrees Awarded
Mechanical	1,888
Computer Sci. (inside Eng.)	1,391
Electrical/Computer	1,339
Chemical	1,164
Biomedical	1,138
Electrical	1,132
Civil	871
Other	851
Metallurgical and Matrls.	791
Computer Sci. (outside Engr.)	620
Industrial/Manufacturing/Systems	617
Aerospace	468
Civil/Environmental	425
Computer	240
Engineering (General)	211
Nuclear	170
Biological and Agricultural	153
Envr. Eng	123
Petroleum	108
Engr. Science and Engr. Physics	106
Engr. Management	81
Mining	19
Architectural	18

* Total does not include computer science (outside engineering).

Doctoral Degrees Awarded by Engineering Discipline
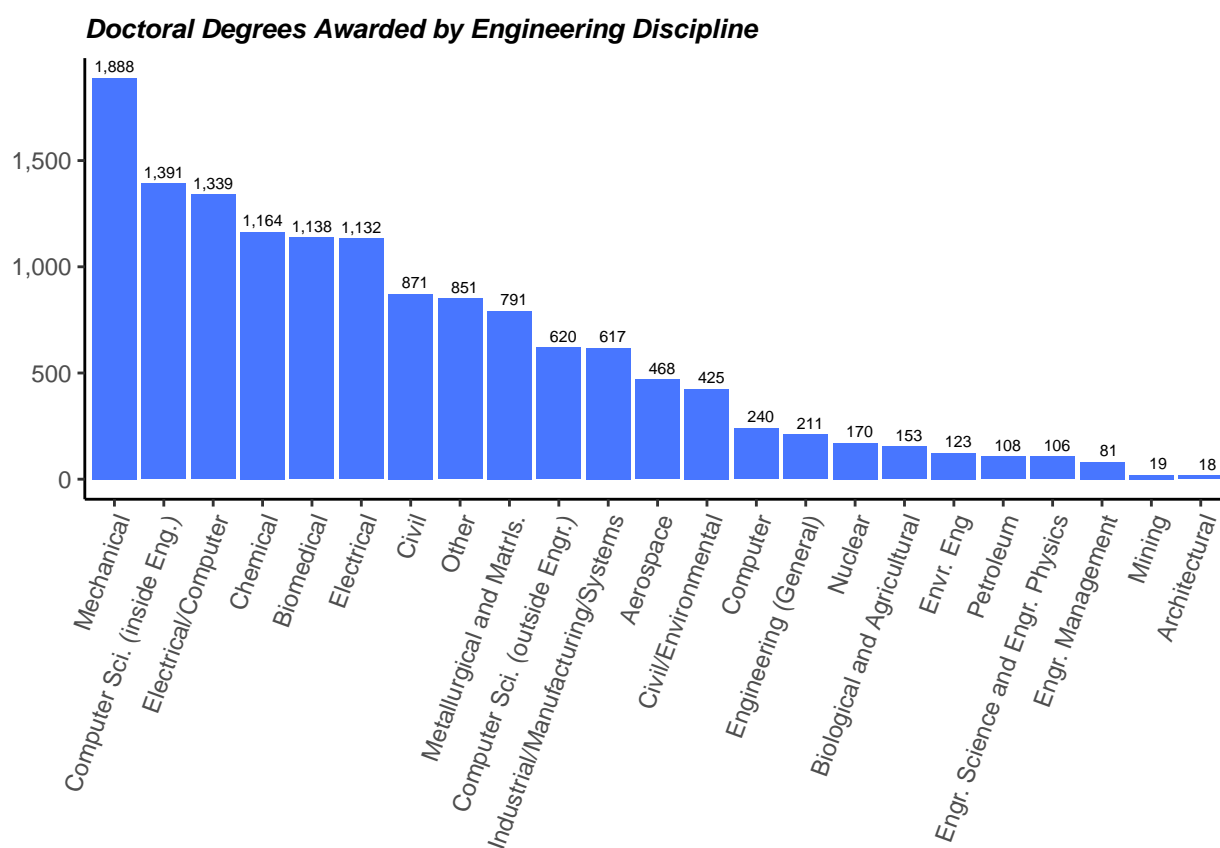
3.1.2 Total Doctoral Degrees Awarded to Underrepresented Minorities by Engineering Discipline

Table 56: Doctoral Degrees Awarded to Underrepresented Minorities by Engineering Discipline: 662

Discipline Name	Degrees Awarded
Mechanical	110
Biomedical	89
Chemical	53
Other	51
Metallurgical and Matrls.	47
Computer Sci. (inside Eng.)	44
Electrical/Computer	43
Electrical	39
Civil	37
Industrial/Manufacturing/Systems	31
Aerospace	25
Computer Sci. (outside Engr.)	21
Civil/Environmental	17
Nuclear	15
Engr. Management	14
Engineering (General)	11
Envr. Eng	11
Biological and Agricultural	8
Computer	8
Engr. Science and Engr. Physics	5
Petroleum	3
Mining	1
Architectural	0

[*] Total does not include computer science (outside engineering).

3.1.3 Percentage of Doctoral Degrees Awarded to Underrepresented Minorities by Discipline

Table 57: Percentage of Doctoral Degrees Awarded to Underrepresented Minorities by Discipline 4.9 % of Total

Discipline Name	Percent Women
Engr. Management	17.3%
Envr. Eng	8.9%
Nuclear	8.8%
Biomedical	7.8%
Other	6%
Metallurgical and Matrls.	5.9%
Mechanical	5.8%
Aerospace	5.3%
Mining	5.3%
Biological and Agricultural	5.2%
Engineering (General)	5.2%
Industrial/Manufacturing/Systems	5%
Engr. Science and Engr. Physics	4.7%
Chemical	4.6%
Civil	4.2%
Civil/Environmental	4%
Computer Sci. (outside Engr.)	3.4%
Electrical	3.4%
Computer	3.3%
Computer Sci. (inside Eng.)	3.2%
Electrical/Computer	3.2%
Petroleum	2.8%
Architectural	0%

3.1.4 Percentage of Doctoral Degrees Awarded to Women by Discipline

Table 58: Percentage of Doctoral Degrees Awarded to Women by Discipline 26.1 % of Total

Discipline Name	Percent Women
Architectural	55.6%
Envr. Eng	51.2%
Biological and Agricultural	43.8%
Biomedical	43.8%
Civil/Environmental	36.2%
Chemical	32.7%
Industrial/Manufacturing/Systems	31.8%
Metallurgical and Matrls.	31.6%
Other	28.2%
Engr. Management	27.2%
Civil	26.6%
Mining	26.3%
Engineering (General)	25.6%
Computer Sci. (inside Eng.)	24.2%
Computer Sci. (outside Engr.)	22.4%
Computer	20%
Mechanical	19.4%
Engr. Science and Engr. Physics	18.9%
Electrical	18.3%
Petroleum	17.6%
Nuclear	17.1%
Electrical/Computer	16.7%
Aerospace	16%

Percentage of Doctoral Degrees Awarded to Women by Discipline
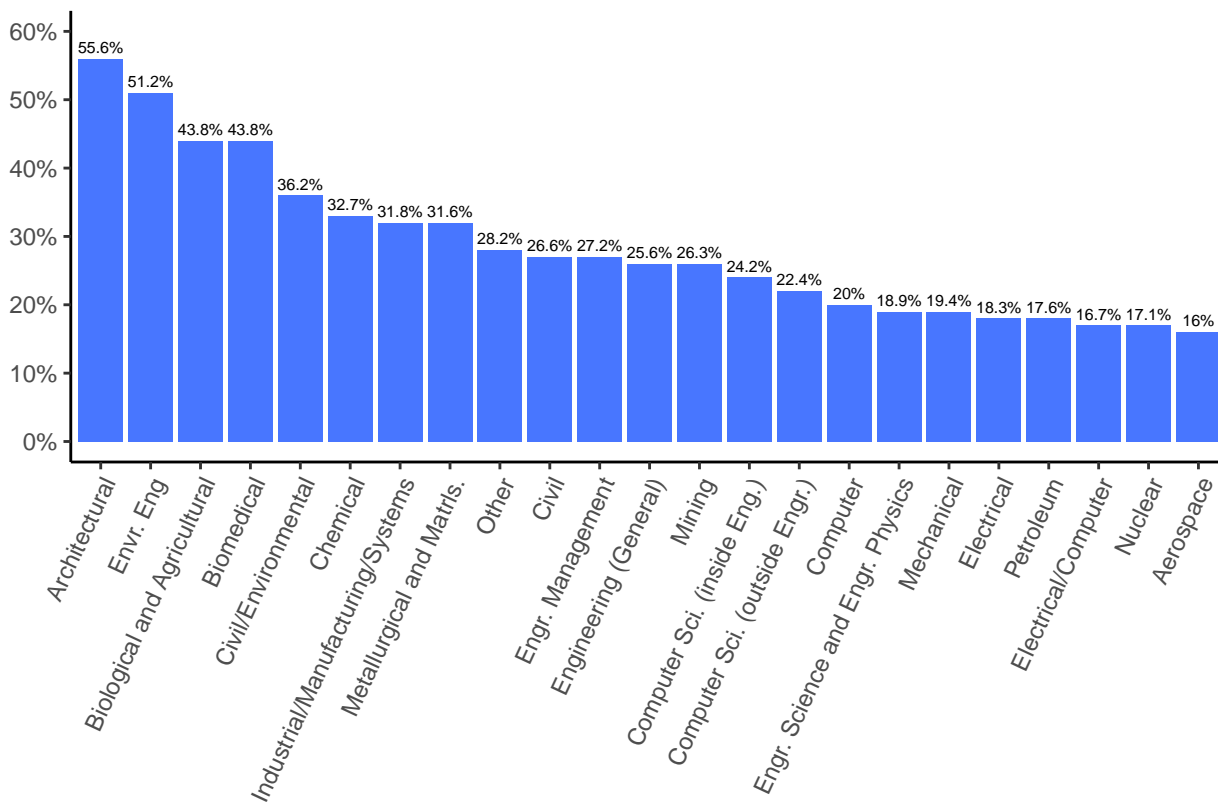
3.1.5 Doctoral Degrees Awarded by Gender

Table 59: Doctoral Degrees Awarded by Gender

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Female	21.20%	22.90%	21.80%	22.20%	22.40%	22.20%	23.30%	23.50%	23.60%	24.10%	23.90%	74.30%	26.20%
Male	78.80%	77.10%	78.20%	77.80%	77.60%	77.80%	76.70%	76.50%	76.40%	75.90%	76.10%	25.70%	73.80%

Doctoral Degrees Awarded by Gender
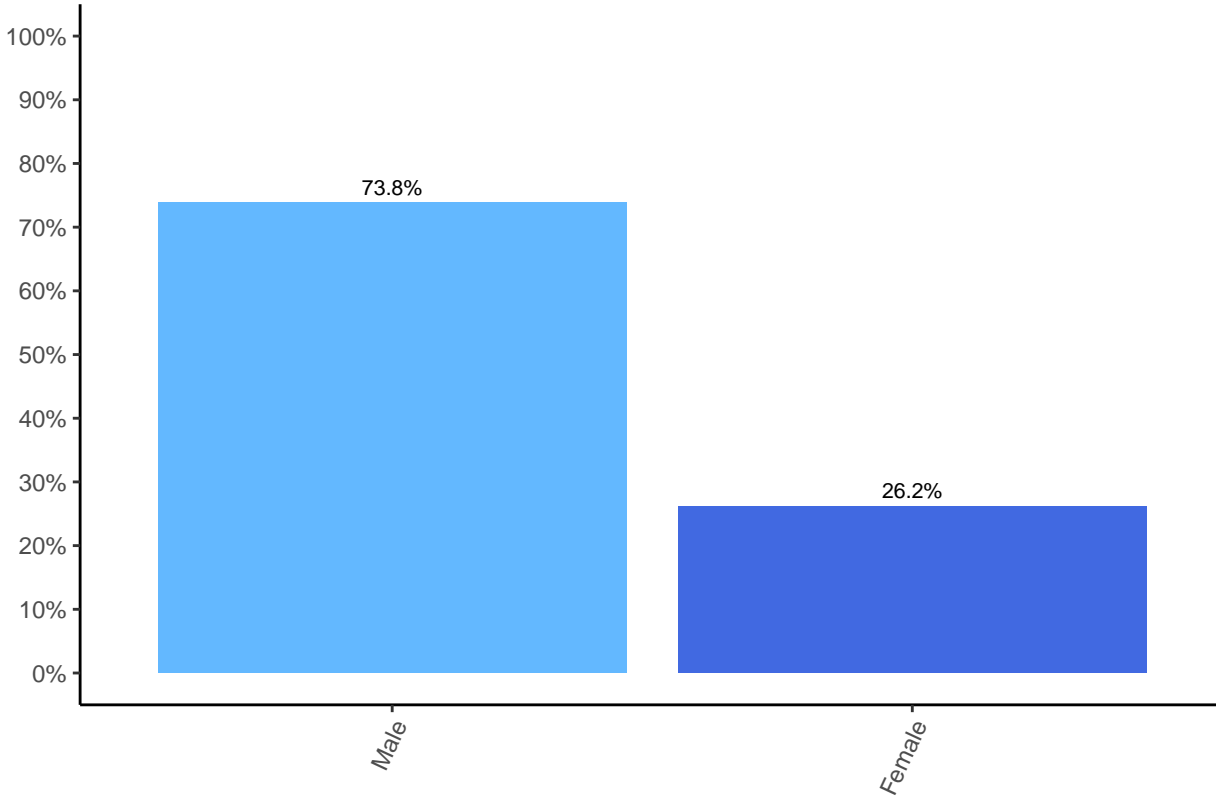
3.1.6 Doctoral Degrees Awarded by Race and Ethnicity

Table 60: Doctoral Degrees Awarded by Ethnicity

Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Black or Afr. American	4.4%	3.5%	4.1%	4.1%	3.6%	3.2%	4.4%	3.8%	4.2%	3.9%	3.6%	3.9%
Hispanic	5.2%	4.2%	4.1%	4.7%	5.1%	6.1%	5.7%	6.3%	6.0%	6.1%	6.9%	7.5%
Other	1.0%	1.6%	1.7%	1.7%	1.6%	2.2%	3.1%	2.9%	2.9%	2.8%	3.6%	3.6%
Asian American	14.0%	15.1%	14.1%	13.5%	10.4%	14.1%	14.9%	14.8%	13.9%	15.3%	15.3%	13.9%
White	65.7%	60.3%	61.1%	61.8%	65.1%	62.9%	62.0%	62.2%	62.0%	61.1%	61%	58.4%
Unknown	9.7%	15.3%	14.9%	14.2%	14.2%	11.5%	9.9%	10.0%	11.1%	10.8%	9.6%	12.6%

Doctoral Degrees Awarded by Race and Ethnicity
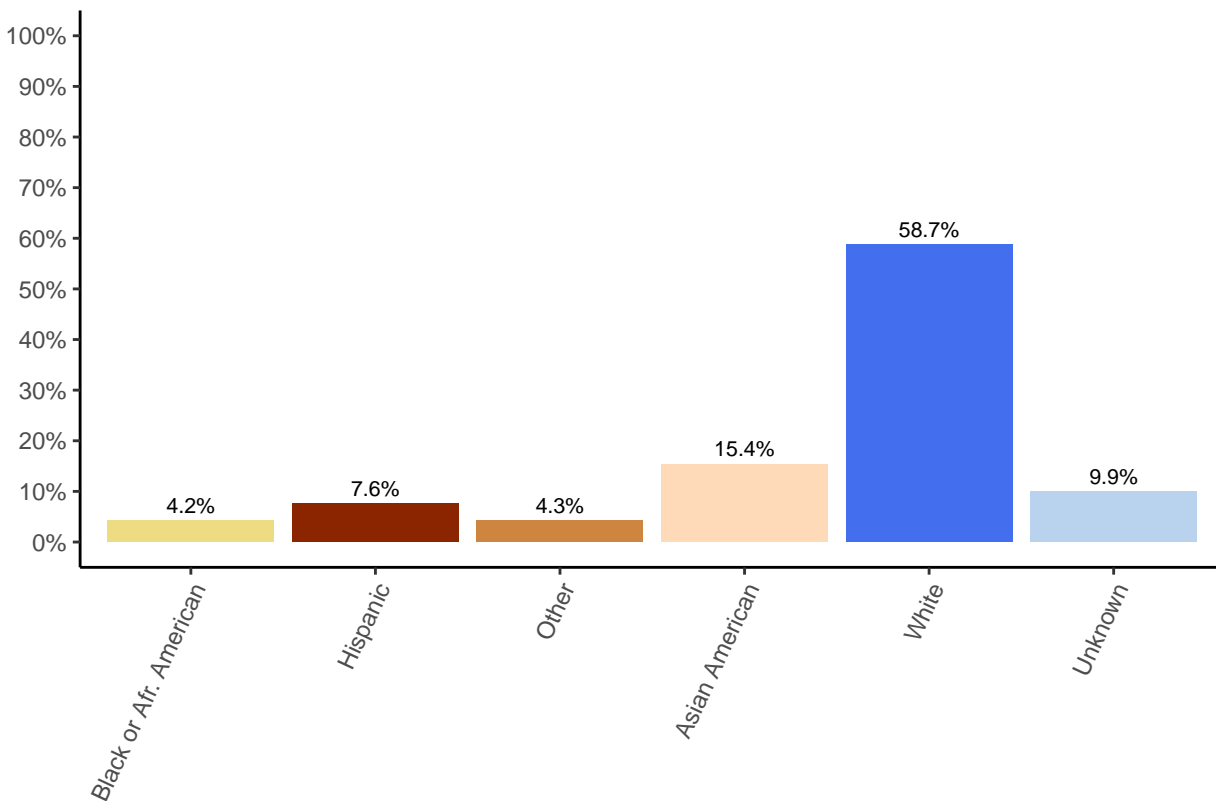
3.1.7 Doctoral Degrees Awarded by Residency

Table 61: Doctoral Degrees Awarded by Residency

Nationality	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Foreign	54.2%	54.2%	53.3%	55.1%	54.8%	54.7%	54.8%	55.7%	56.3%	56.5%	58.8%	58.5%
Domestic	45.8%	45.8%	46.7%	44.9%	45.2%	45.3%	45.2%	44.3%	43.7%	43.5%	41.2%	41.5%

Doctoral Degrees Awarded by Residency
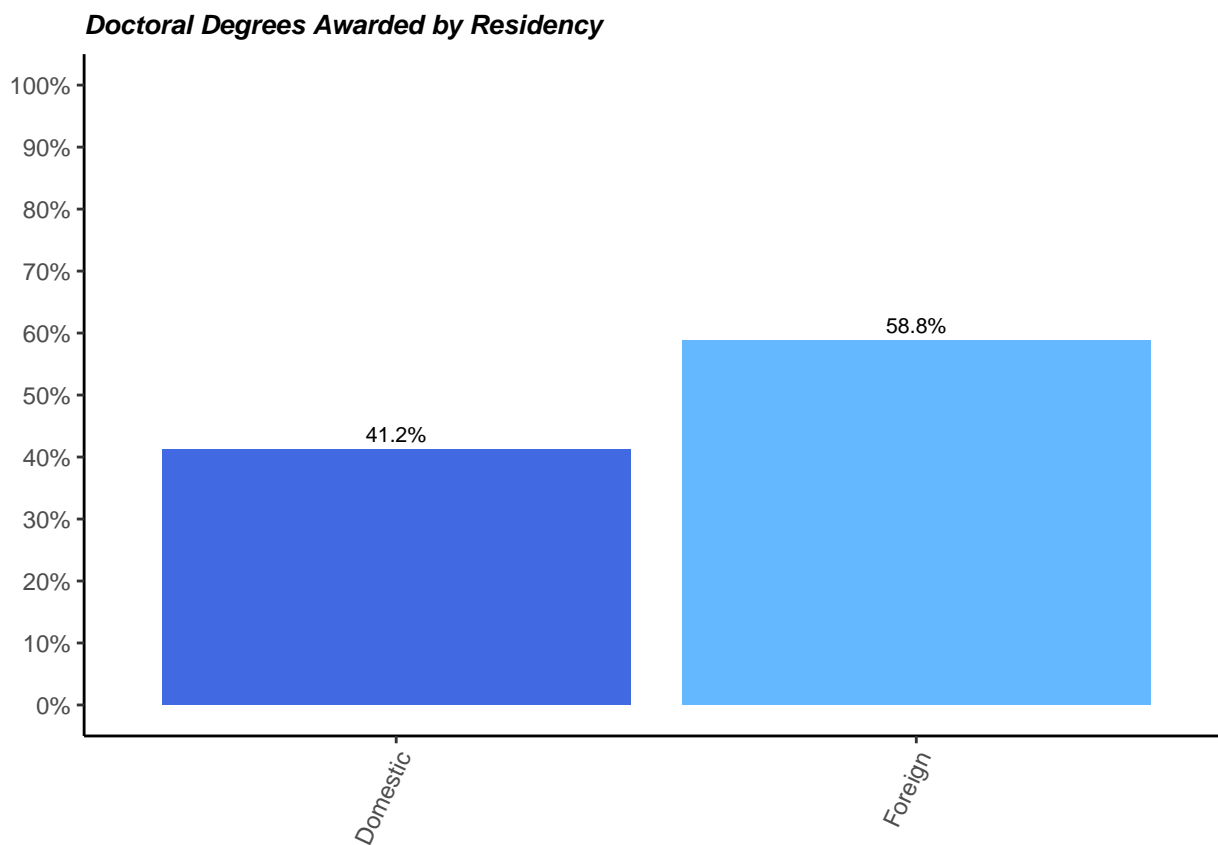
3.1.8 Doctoral Degrees Awarded by Race, Ethnicity, and Gender

Table 62: Doctoral Degrees Awarded by Race, Ethnicity, and Gender 13,304*

Ethnicity	Degrees
Nonresident Alien Male	5,878
Nonresident Alien Female	1,890
Unknown Male	340
Unknown Female	160
Hispanic Male	277
Hispanic Female	140
White Male	2,354
White Female	887
Black or Afr. American Male	158
Black or Afr. American Female	73
Asian American Male	583
Asian American Female	268
American Indian Male	11
American Indian Female	2
Native Hawaiian/Other Pacific Islander Male	0
Native Hawaiian/Other Pacific Islander Female	0
Multiracial Male	146
Multiracial Female	76
Total Male	9,747
Total Female	3,496

* Total degree includes 0 total Non binary graduates and 61 total Other Gender graduates.

* Includes 7 male and4 female graduates from Puerto Rico.

Doctoral Degrees Awarded by Race, Ethnicity, and Gender
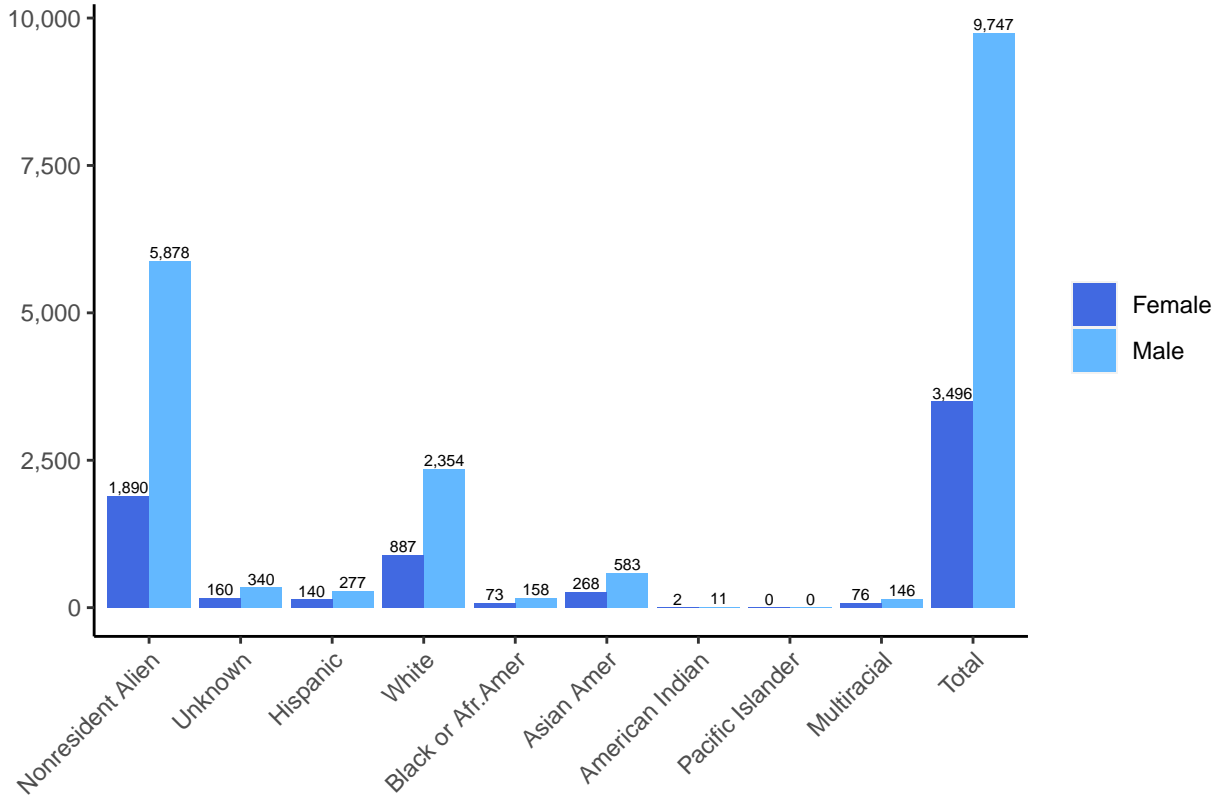
3.1.9 Top 50 Institutions Awarding Engineering Doctoral Degrees

Table 63: Top 50 Institutions Awarding Engineering Doctoral Degrees

No	Institutions	Degrees Awarded
1	Georgia Institute of Technology	412
2	Massachusetts Institute of Technology	409
3	Purdue University	389
4	Stanford University	364
5	University of Illinois at Urbana-Champaign	354
6	Texas A&M University	348
7	University of Michigan	314
8	University of California, Berkeley	271
9	Carnegie Mellon University	256
10	The University of Texas at Austin	236
11	The Pennsylvania State University	223
12	University of California, San Diego	217
13	University of California, Los Angeles	207
14	Virginia Polytechnic Institute and State University	204
15	The Johns Hopkins University	196
16	Arizona State University	193
17	The Ohio State University	189
18	Cornell University	180
18	University of Maryland, College Park	180
20	University of Florida	170
21	University of Colorado Boulder	165
21	University of Minnesota -Twin Cities	165
23	University of Southern California	151
24	University of California, Irvine	149
24	University of Central Florida	149
26	Northwestern University	147
27	North Carolina State University	144
28	University of Wisconsin-Madison	143
29	Iowa State University	142
30	University of Utah	141
31	Northeastern University	139
32	Princeton University	133
33	University of Houston	117
34	University of California, Davis	114
35	Duke University	111
35	University at Buffalo, SUNY	111
37	Fu Foundation School of Engineering and Applied Science - Columbia University	110
38	The University of Texas at Dallas	107
38	University of California, Riverside	107
40	University of Tennessee, Knoxville	105
41	Boston University	104

No	Institutions	Degrees Awarded
42	Clemson University	103
42	The George Washington University	103
42	University of Virginia	103
45	The University of Texas at Arlington	102
45	University of Notre Dame	102
47	William Marsh Rice University	101
48	Rutgers, The State University of New Jersey, School of Engineering	98
48	University of California, Santa Barbara	98
50	Colorado State University	97

* 202 Institutions reported.Includes both part time and full time

3.1.10 Top 20 Institutions by Total Doctoral Degrees awarded to Underrepresented Minorities

Table 64: Top 20 Institutions by Total Doctoral Degrees awarded to Underrepresented Minorities

No	Institutions	Degrees Awarded
1	University of Florida	30
2	Georgia Institute of Technology	27
3	Massachusetts Institute of Technology	25
4	University of California, Berkeley	24
5	Stanford University	21
6	University of California, San Diego	18
7	University of Michigan	17
8	Carnegie Mellon University	16
8	Texas A&M University	16
10	Purdue University	15
11	The George Washington University	13
11	University of Illinois at Urbana-Champaign	13
13	University of Puerto Rico, Mayaguez Campus	11
13	University of South Florida	11
15	Cornell University	10
15	University of California, Los Angeles	10
15	University of Central Florida	10
15	University of Maryland, College Park	10
15	University of Pennsylvania	10
20	Arizona State University	9

* 202 Institutions included

3.1.11 Top 50 Institutions by Percentage of Doctoral Degrees awarded to Underrepresented Minorities

Table 65: Top 50 Institutions by Percentage of Doctoral Degrees awarded to Underrepresented Minorities

No	Institutions	Percent Underrepresented Minorities
1	Capitol Technology University	100%
1	Tuskegee University	100%
1	University of Puerto Rico, Mayaguez Campus	100%
4	Jackson State University	60%
5	Morgan State University	30.8%
6	University of South Alabama	28.6%
7	The University of Texas at El Paso	26.7%
8	University of Miami	22.9%
9	University of Southern Mississippi	20%
10	City College of the City University of New York	19%
11	FAMU-FSU College of Engineering	18.6%
12	University of Florida	17.6%
13	The Catholic University of America	16.7%
14	University of Alabama at Birmingham	15.8%
15	Air Force Institute of Technology	15.4%
16	North Carolina A&T State University	14.8%
17	University of South Florida	14.7%
18	Florida International University	13%
19	The George Washington University	12.6%
20	Louisiana Tech University	12.5%
20	The University of Tulsa	12.5%
22	Florida Atlantic University	11.1%
22	Howard University	11.1%
24	New Mexico State University	10.7%
25	University of Pennsylvania	10.5%
26	Vanderbilt University	10.4%
27	Old Dominion University	10.3%

Table 65: Top 50 Institutions by Percentage of Doctoral Degrees
awarded to Underrepresented Minorities *(continued)*

No	Institutions	Percent Underrepresented Minorities
28	Clarkson University	10%
28	San Diego State University	10%
30	Dartmouth College	9.7%
30	The State University of New York at Binghamton	9.7%
30	Virginia Commonwealth University	9.7%
33	Boise State University	9.5%
34	The University of Mississippi	9.1%
34	University of Wisconsin, Milwaukee	9.1%
36	William Marsh Rice University	8.9%
37	North Dakota State University	8.9%
37	University of Maryland, Baltimore County	8.9%
39	University of California, Berkeley	8.9%
40	University of Bridgeport	8.3%
40	University of Louisiana at Lafayette	8.3%
42	University of California, San Diego	8.3%
43	Embry Riddle Aeronautical University-Daytona Beach	8%
44	University of North Dakota	7.7%
45	The University of Texas at Dallas	7.5%
46	University of Idaho	7.4%
47	The University of New Mexico	7.3%
48	The University of Texas at San Antonio	7.1%
48	University of California, Santa Barbara	7.1%
48	University of North Carolina at Chapel Hill	7.1%

* 202 Institutions included

3.1.12 Top 20 Institutions Awarding Highest Percentage of Doctoral Degrees to Women

Table 66: Top 20 Highest Percentage of Doctoral Degrees to
Women

No	Institutions	Percent Women
1	Capitol Technology University	100%
2	Northern Arizona University	75%
3	SUNY College of Environmental Science and Forestry	66.7%
4	SUNY Polytechnic Institute	62.5%
5	Jackson State University	60%
5	University of Alaska Fairbanks, College of Engineering and Mines	60%
7	Howard University	55.6%
8	San Diego State University	50%
9	University of Vermont	46.7%
10	Louisiana Tech University	43.8%
11	University of Missouri - Kansas City	42.9%
11	University of South Alabama	42.9%
13	Texas State University	40%
13	University of Southern Mississippi	40%
15	Case Western Reserve University	39.7%
16	Boise State University	38.1%
17	Drexel University	37.5%
17	Saint Louis University	37.5%
19	Illinois Institute of Technology	36.8%
20	Mississippi State University	36.8%

* 202 Institutions included

3.1.13 Top 50 Institutions Awarding Doctoral Degrees to Foreign Nationals

Table 67: Top 50 Institutions Awarding Doctoral Degrees to For-
eign Nationals

No	Institutions	Degrees Awarded
1	Purdue University	259
2	Texas A&M University	242
3	University of Illinois at Urbana-Champaign	229
4	Georgia Institute of Technology	222
5	Massachusetts Institute of Technology	207
6	University of Michigan	162
7	Stanford University	161
8	Carnegie Mellon University	153
9	The University of Texas at Austin	149
10	The Pennsylvania State University	147
11	University of California, Los Angeles	142
12	Virginia Polytechnic Institute and State University	134
13	University of California, San Diego	131
14	Arizona State University	121
15	The Ohio State University	120
16	University of California, Berkeley	116
17	Northeastern University	107

Table 67: Top 50 Institutions Awarding Doctoral Degrees to Foreign Nationals *(continued)*

No	Institutions	Degrees Awarded
18	University of Central Florida	103
19	The Johns Hopkins University	102
20	University of Maryland, College Park	100
20	University of Southern California	100
22	University of Minnesota -Twin Cities	97
23	Iowa State University	95
24	University of Houston	94
25	Cornell University	92
26	North Carolina State University	89
26	University at Buffalo, SUNY	89
26	University of California, Irvine	89
29	The University of Texas at Dallas	81
30	University of Florida	80
31	Northwestern University	74
31	Princeton University	74
31	Rutgers, The State University of New Jersey, School of Engineering	74
34	The University of Texas at Arlington	73
35	Stony Brook University	72
36	Auburn University	71
37	University of California, Riverside	70
38	Missouri University of Science and Technology	69
38	University of Utah	69
40	University of Notre Dame	65
41	Clemson University	64
41	University of California, Davis	64
41	University of Massachusetts Amherst	64
44	Boston University	59
44	University of Illinois at Chicago	59
46	University of Wisconsin-Madison	56
46	William Marsh Rice University	56
48	University of Delaware	54
48	University of Virginia	54
50	Duke University	52

[*] 202 Institutions included

3.1.14 Top 50 Institutions Awarding Bachelor's Degrees (excluding computer science both inside and outside Engineering)

Table 68: Top 50 Institutions Awarding Bachelor's Degrees (excluding computer science)

No	Institutions	Degrees Awarded
1	Texas A&M University	2,618
2	Arizona State University	2,496
3	Purdue University	2,255
4	Georgia Institute of Technology	2,043
5	University of Illinois at Urbana-Champaign	1,833
6	Iowa State University	1,674
7	The Pennsylvania State University	1,629
8	Virginia Polytechnic Institute and State University	1,540
9	North Carolina State University	1,374
10	University of Central Florida	1,329
11	The Ohio State University	1,322
12	The University of Texas at Austin	1,274
13	University of Florida	1,262
14	University of Michigan	1,209
15	California State Polytechnic University, Pomona	1,158
16	University of California, Berkeley	1,143
17	University of Maryland, College Park	1,080
18	California Polytechnic State University, San Luis Obispo	1,073
19	University of Colorado Boulder	996
20	University of Wisconsin-Madison	993
21	University of California, San Diego	981
22	Clemson University	933
23	University of California, Irvine	932
24	Oregon State University	929
25	San Jose State University	910
26	Louisiana State University	901
27	Missouri University of Science and Technology	895
28	Northeastern University	894
29	New Jersey Institute of Technology	891

Table 68: Top 50 Institutions Awarding Bachelor's Degrees (excluding computer science) *(continued)*

No	Institutions	Degrees Awarded
30	George Mason University	870
31	Florida International University	851
32	Stony Brook University	846
33	San Diego State University	836
34	Colorado School of Mines	833
35	Mississippi State University	829
36	Rutgers, The State University of New Jersey, School of Engineering	827
37	California State University, Long Beach	815
38	University at Buffalo, SUNY	803
38	University of Minnesota -Twin Cities	803
40	Rensselaer Polytechnic Institute	792
41	Auburn University	783
42	University of South Florida	779
43	Worcester Polytechnic Institute	777
44	Kennesaw State University	755
45	Rochester Institute of Technology	746
46	The University of Alabama	738
47	University of California, Los Angeles	732
48	West Virginia University	707
49	University of California, Davis	705
50	Oklahoma State University	693

* 414 Institutions included

3.1.15 Top 50 Institutions Awarding Master's Degrees (excluding computer science both inside and outside Engineering)

Table 69: Top 50 Institutions Awarding Master's Degrees (excluding computer science)

No	Institutions	Degrees Awarded
1	Northeastern University	1,668
2	Georgia Institute of Technology	1,161
3	University of California, Berkeley	1,160
4	Columbia University	1,075
5	University of Michigan	1,037
6	University of Southern California	1,031
7	Carnegie Mellon University	923
8	Cornell University	863
9	Massachusetts Institute of Technology	798
10	Arizona State University	784
11	NYU Tandon School of Engineering	742
12	San Jose State University	723
13	Stanford University	670
14	Texas A&M University	609
15	Northwestern University	592
16	University at Buffalo, SUNY	567
17	University of California, San Diego	556
18	University of Colorado Boulder	530
19	The Johns Hopkins University	525
20	Stevens Institute of Technology	520
21	University of Illinois at Urbana-Champaign	516
22	University of California, Los Angeles	513
23	University of Florida	510
24	University of Pennsylvania	459
25	Purdue University	441
26	North Carolina State University	434
27	The George Washington University	423
27	The Pennsylvania State University	423
29	University of Wisconsin-Madison	370
29	Worcester Polytechnic Institute	370
31	Virginia Polytechnic Institute and State University	369
32	George Mason University	350
33	Duke University	339
34	The University of Texas at Austin	332
35	The University of Texas at Arlington	329
36	University of Massachusetts Lowell	328
37	Washington University in St. Louis	325
38	Air Force Institute of Technology	324
39	Missouri University of Science and Technology	319
40	Boston University	316
41	University of Maryland, College Park	308
42	University of Central Florida	300
43	New Jersey Institute of Technology	299
43	University of Michigan-Dearborn	299
45	The Ohio State University	288
46	Illinois Institute of Technology	276
47	Florida International University	275
48	The University of Texas at El Paso	262
49	Oregon State University	260
50	Clemson University	257

* 301 Institutions included

3.1.16 Top 50 Institutions Awarding Doctoral Degrees (excluding computer science both inside and outside Engineering)

Table 70: Top 50 Institutions Awarding Doctoral Degrees (excluding computer science)

No	Institutions	Degrees Awarded
1	Massachusetts Institute of Technology	409
2	Georgia Institute of Technology	381
3	Purdue University	360
4	Texas A&M University	327
5	Stanford University	319
6	University of Illinois at Urbana-Champaign	293
7	University of Michigan	282
8	University of California, Berkeley	224
9	The Pennsylvania State University	223
10	The University of Texas at Austin	212
11	Virginia Polytechnic Institute and State University	182
12	Arizona State University	175
13	University of California, San Diego	174
14	University of California, Los Angeles	164
15	The Johns Hopkins University	163
16	The Ohio State University	162
17	University of Florida	157
18	Cornell University	150
19	University of Colorado Boulder	145

Table 70: Top 50 Institutions Awarding Doctoral Degrees (excluding computer science) *(continued)*

No	Institutions	Degrees Awarded
20	Carnegie Mellon University	144
21	University of Maryland, College Park	141
22	Iowa State University	132
23	Northwestern University	131
23	University of Minnesota -Twin Cities	131
25	North Carolina State University	128
26	University of Central Florida	121
26	University of Wisconsin-Madison	121
28	Northeastern University	115
29	University of Southern California	113
30	University of Utah	109
31	University of California, Irvine	108
32	Princeton University	103
33	Duke University	102
34	University of Houston	101
35	University of Tennessee, Knoxville	99
36	Fu Foundation School of Engineering and Applied Science - Columbia University	97
37	University of California, Davis	96
38	Clemson University	95
38	The George Washington University	95
40	William Marsh Rice University	94
41	University of Virginia	91
42	Boston University	90
43	University at Buffalo, SUNY	89
44	Colorado State University	87
45	Missouri University of Science and Technology	85
45	University of California, Santa Barbara	85
47	The University of Texas at Arlington	84
48	University of Pennsylvania	80
49	University of Pittsburgh	78
50	Rutgers, The State University of New Jersey, School of Engineering	77

* 201 Institutions included

3.1.17 Institutions with the Highest Percentage of Doctoral Degrees to Foreign Nationals

Table 71: Highest Percentage of Doctoral Degrees to Foreign Nationals (min 25 awarded)

No	Institutions	Percentage
1	Indiana University-Purdue University Indianapolis	100%
1	Lamar University	100%
1	Prairie View A & M University	100%
1	SUNY College of Environmental Science and Forestry	100%
1	University of Hawaii at Manoa	100%
6	Illinois Institute of Technology	97.4%
7	Wichita State University	91.7%
8	The University of Mississippi	90.9%
9	Oklahoma State University	88%
10	University of North Texas	87.8%
11	University of Missouri - Kansas City	85.7%
12	North Carolina A&T State University	85.2%
13	Lawrence Technological University	83.3%
13	South Dakota State University	83.3%
13	The Catholic University of America	83.3%
16	Auburn University	82.6%
17	University of Arkansas at Little Rock	82.4%
18	University of Wyoming	82.1%
19	Florida International University	81.5%
20	University of Houston	80.3%
21	University at Buffalo, SUNY	80.2%
22	Clarkson University	80%
22	Tennessee State University	80%
24	University of Louisville	79.4%
25	Lehigh University	78.9%
26	Southern Methodist University	78.3%
27	Southern Illinois University Carbondale	77.8%
28	Northeastern University	77%
29	University of Denver	76.9%
30	Missouri University of Science and Technology	76.7%
31	Stony Brook University	76.6%
32	Brown University	76.5%
32	Syracuse University	76.5%
32	University of Michigan-Dearborn	76.5%
35	University of North Carolina at Charlotte	76.3%
36	University of Nevada, Reno	76%
37	University of California, Merced	75.8%

Table 71: Highest Percentage of Doctoral Degrees to Foreign Nationals (min 25 awarded) *(continued)*

No	Institutions	Percentage
38	The University of Texas at Dallas	75.7%
39	Rutgers, The State University of New Jersey, School of Engineering	75.5%
40	Cleveland State University	75%
40	Marquette University	75%
40	Oakland University	75%
40	University of Detroit Mercy	75%
40	University of Massachusetts-Boston	75%
45	NYU Tandon School of Engineering	74%
46	New Jersey Institute of Technology	73.9%
47	The University of Texas at San Antonio	73.2%
48	University of Wisconsin, Milwaukee	72.7%
49	University of New Hampshire	72.2%
50	Embry Riddle Aeronautical University-Daytona Beach	72%

* 202 Institutions included

3.1.18 Institutions with the Lowest Percentage of Doctoral Degrees to Foreign Nationals

Table 72: Institutions with the Lowest Percentage of Doctoral Degrees to Foreign Nationals (min 25 awarded)

No	Institutions	Percentage
1	Idaho State University	40%
1	Jackson State University	40%
1	University of Alaska Fairbanks, College of Engineering and Mines	40%
4	University of Rhode Island	41.2%
5	North Dakota State University	42.2%
6	University of California, Berkeley	42.8%
7	Boise State University	42.9%
7	South Dakota School of Mines and Technology	42.9%
7	University of New Orleans	42.9%
10	The University of Iowa	43.2%
11	The University of New Mexico	43.9%
12	Stanford University	44.2%
13	University of California, Santa Barbara	44.9%
14	Virginia Commonwealth University	45.2%
15	University of Colorado Denver	45.5%
16	University of Tennessee, Knoxville	45.7%
17	Morgan State University	46.2%
18	University of North Carolina at Chapel Hill	46.4%
19	Duke University	46.8%
20	University of Florida	47.1%
21	Colorado State University	47.4%
22	City College of the City University of New York	47.6%
23	Dartmouth College	48.4%
23	University of Pennsylvania	48.4%
25	Wayne State University	48.8%

* 202 Institutions included

3.1.19 Top 10 Institutions by Total Doctoral Degrees awarded in Engineering (General)

Table 73: Top 10 Institutions by Total Doctoral Degrees awarded in Engineering (General)

No	Institutions	Degrees Awarded
1	Dartmouth College	23
2	The University of Memphis	20
3	Brown University	16
3	University of Colorado Colorado Springs	16
5	University of Nebraska, Lincoln	13
6	Morgan State University	11
6	University of California, Berkeley	11
8	Arizona State University	10
9	Lamar University	9
9	Rochester Institute of Technology	9

* 26 Institutions included

3.2 ENGINEERING DOCTORAL ENROLLMENT

3.2.1 Doctoral Enrollment by Race, Ethnicity, and Gender

Table 74: Doctoral Enrollment by Race, Ethnicity, and Gender 77,597*

Ethnicity	Enrollments
Nonresident Alien Male	32,182
Nonresident Alien Female	11,768
Unknown Male	2,557
Unknown Female	1,153
Hispanic Male	2,128
Hispanic Female	1,045
White Male	12,335
White Female	5,654
Black or Afr. American Male	940
Black or Afr. American Female	632
Asian American Male	3,614
Asian American Female	1,962
American Indian Male	47
American Indian Female	35
Native Hawaiian/Other Pacific Islander Male	24
Native Hawaiian/Other Pacific Islander Female	13
Multiracial Male	888
Multiracial Female	484
Total Male	54,715
Total Female	22,746

* Includes 76 male and39 female enrolled students from Institutions in Puerto Rico.

Doctoral Enrollment by Race, Ethnicity, and Gender

50
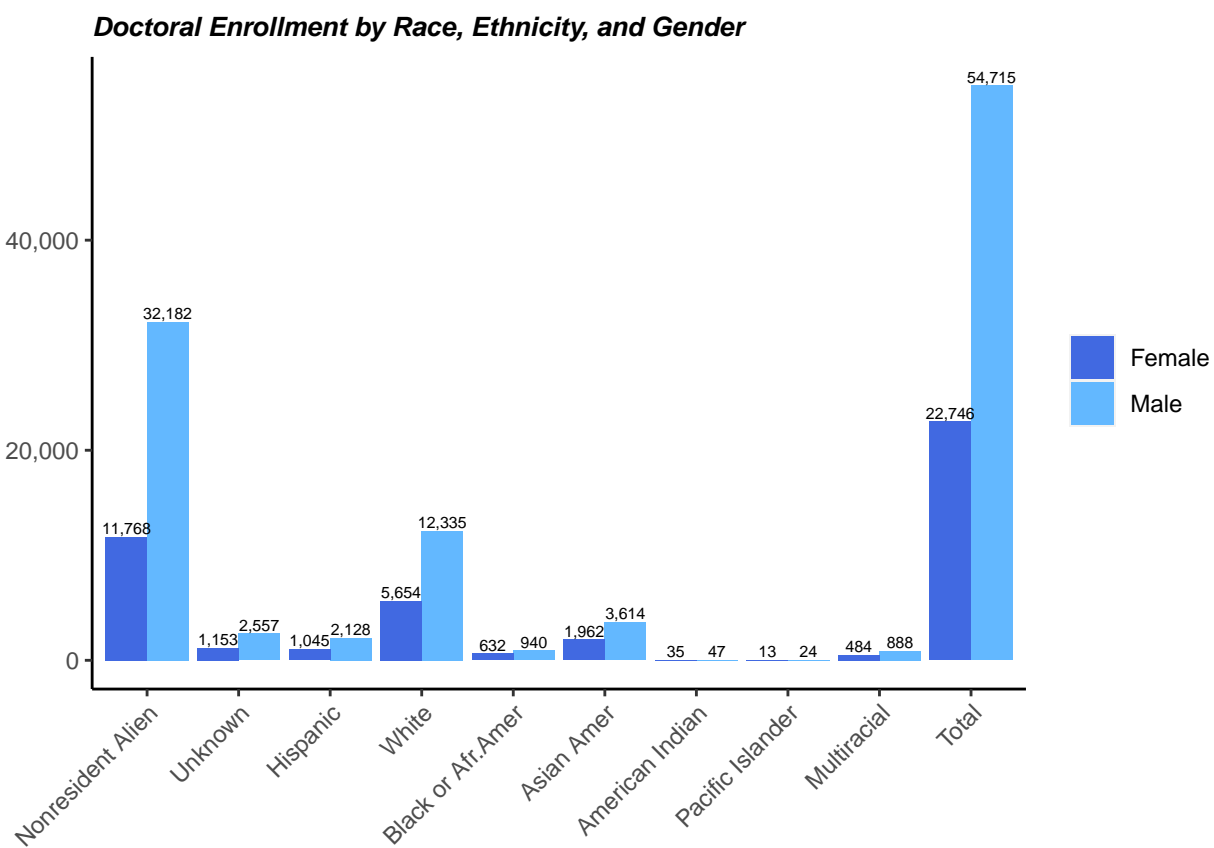
3.2.2 Doctoral Enrollment by Engineering Discipline:(Full time and Part time)

Table 75: Doctoral Enrollment by Engineering Discipline:(Full time and Part time)

Discipline Name	Full Time	Part Time
Aerospace	2,760	277
Aerospace Engineering Technology	3	2
Architectural	118	2
Biological and Agricultural	693	72
Biomedical	8,199	394
Chemical	6,640	228
Civil	4,138	480
Civil/Environmental	1,952	243
Computer	1,619	243
Computer Sci. (inside Eng.)	10,768	1,067
Computer Sci. (outside Engr.)	4,270	362
Electrical	5,770	585
Electrical/Computer	8,448	836
Engineering (General)	813	197
Engineering Management	122	190
Engr. Science and Engr. Physics	585	28
Envr. Eng	937	68
Industrial/Manufacturing/Systems	2,905	714
Mechanical	10,334	910
Metallurgical and Matrls.	3,830	175
Mining	84	15
Nuclear	877	77
Other	5,565	750
Petroleum	437	41

3.2.3 Doctoral Enrollment by Gender

Table 76: Doctoral Enrollment by Gender

Gender	Percentage
Female	29.4%
Male	70.6%

Doctoral Enrollment by Gender
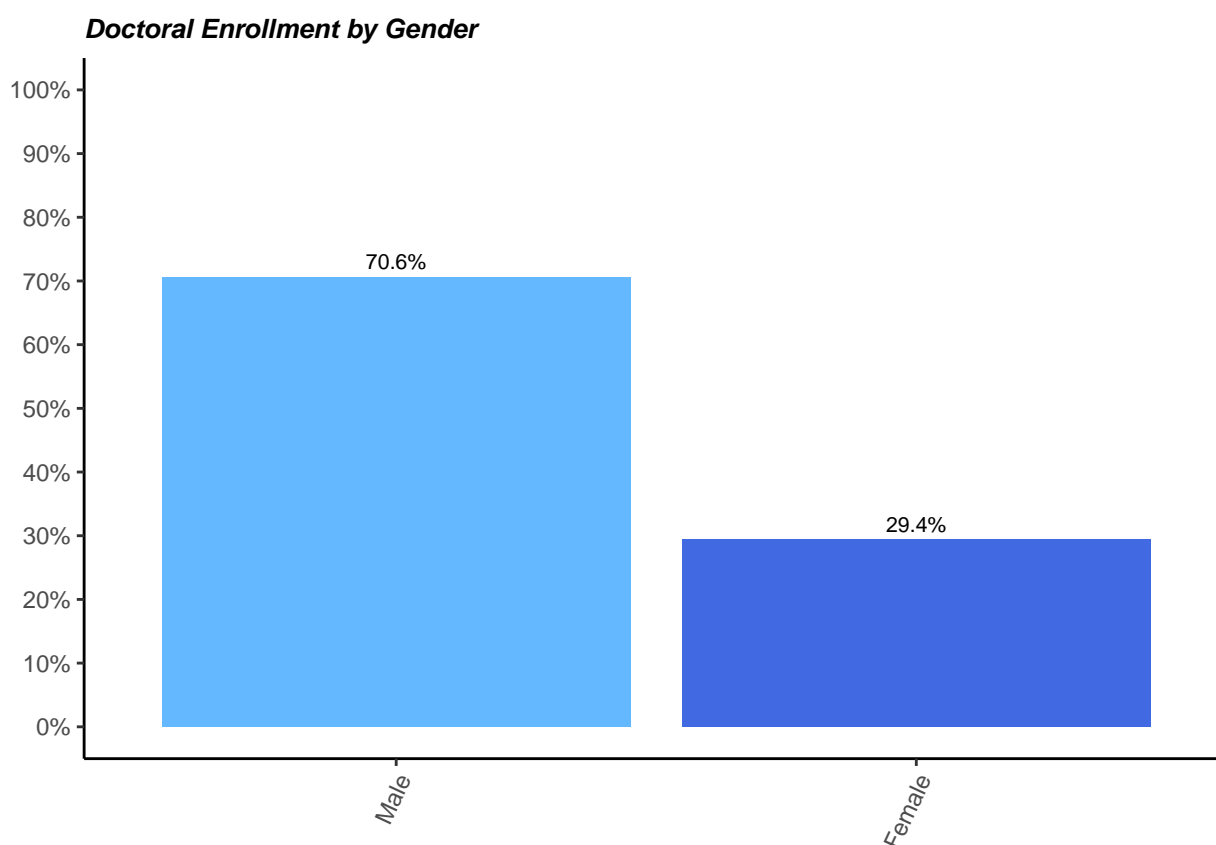
3.2.4 Doctoral Enrollment by Race and Ethnicity

Table 77: Doctoral Enrollment by Race and Ethnicity*

Ethnicity	Percentage
Black or Afr. American	4.9%
Hispanic	9.3%
Other	4.3%
Asian American	14.8%
White	57.6%
Unknown	9.1%

Doctoral Enrollment by Race and Ethnicity
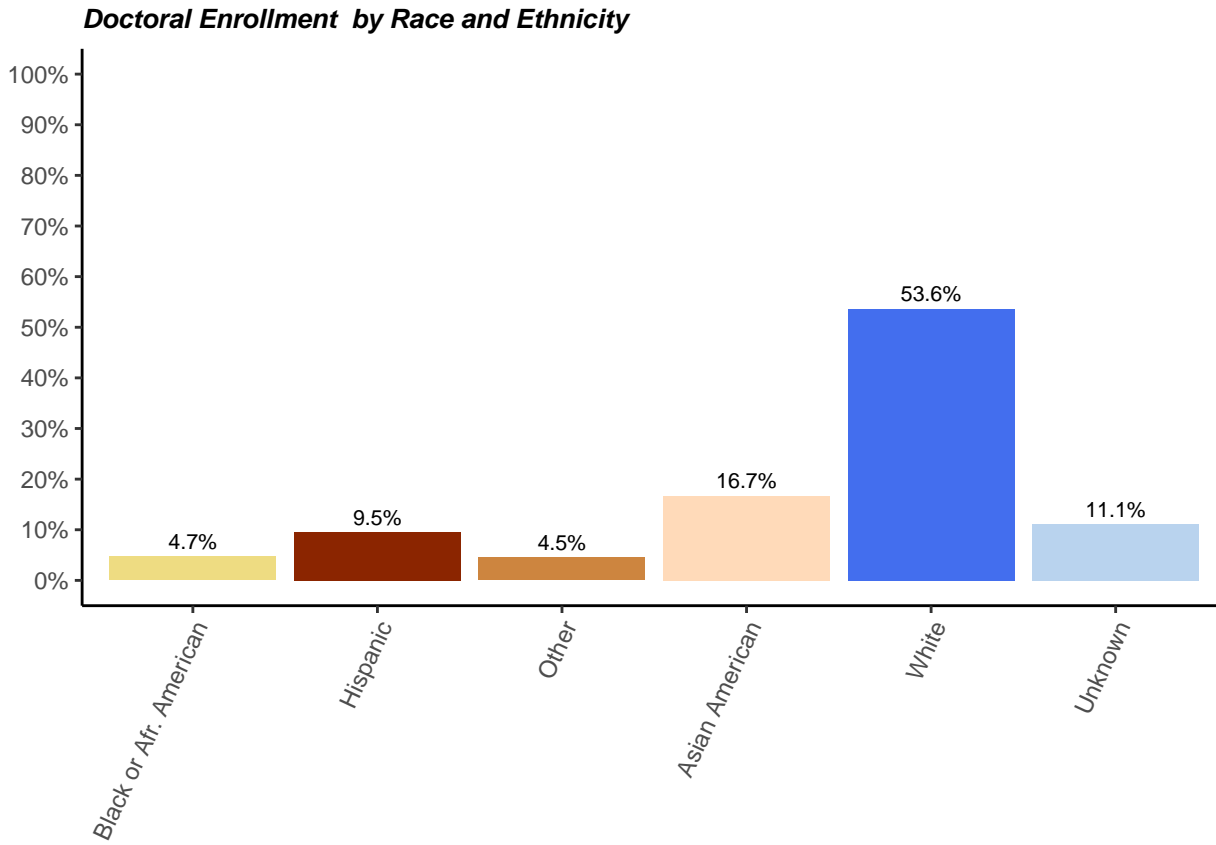
3.2.5 Doctoral Enrollment by Residency

Table 78: Doctoral Enrollment by Residency

Nationality	Percentage
Foreign	58.3%
Domestic	41.7%

Doctoral Enrollment by Residency
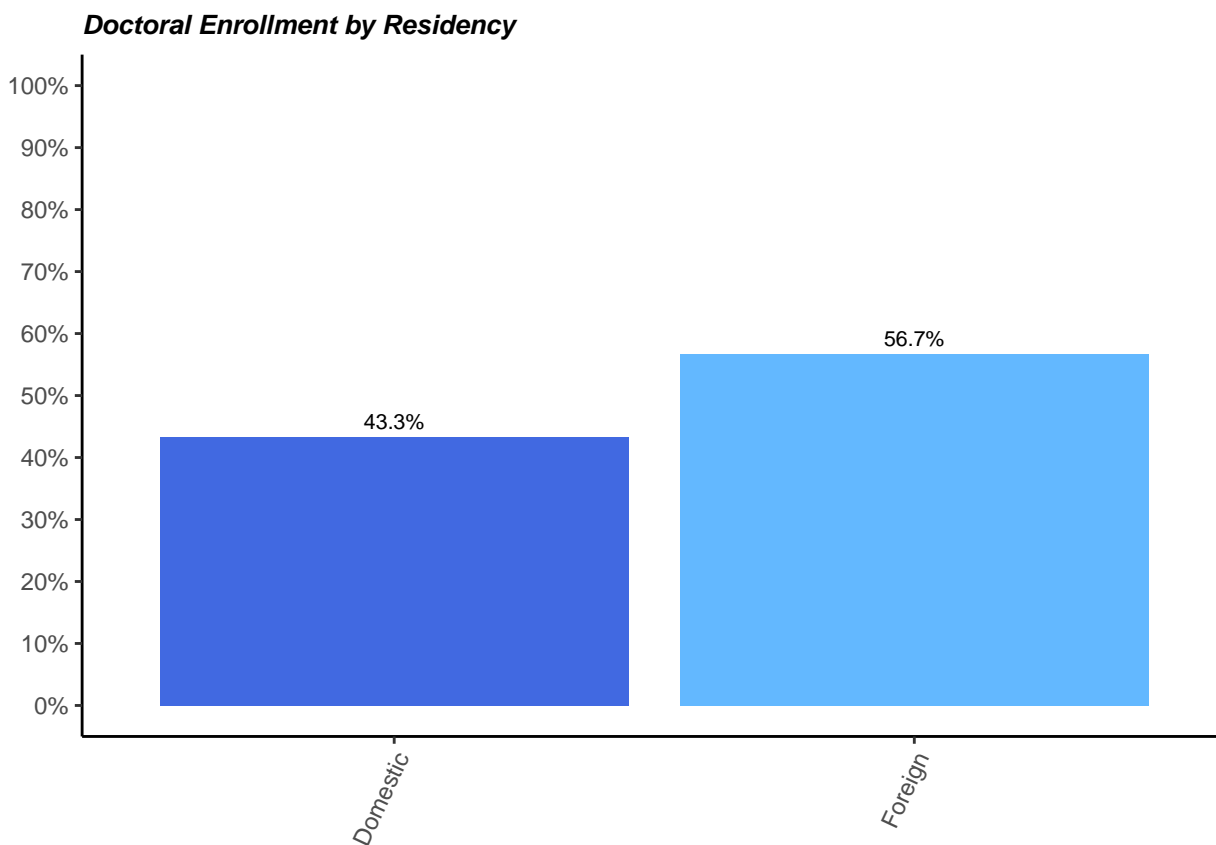
4 ENGINEERING FACULTY

4.1 Number of Tenured/Tenure-Track Faculty by Engineering Discipline

Table 79: Number of Tenured/Tenure-Track Faculty by Engineering Discipline: 30,332

Discipline Name	Number of Faculty
Mechanical	5,229
Electrical/Computer	4,444
Comp Sci. (inside Eng.)	3,404
Other	2,569
Chemical	2,123
Civil/Environmental	1,921
Biomedical	1,806
Civil	1,626
Computer Sci. (outside Engr.)	1,361
Industrial/Manufacturing/Systems	1,188
Electrical	1,115
Metallurgical and Matrls.	991
Engineering (General)	898
Aerospace	812
Biological and Agricultural	497
Computer	454
Engr. Science and Engr. Physics	313
Envr. Eng	262
Nuclear	234
Petroleum	166
Engr. Management	108
Architectural	95
Mining	77

[*] Total does not include computer science (outside engineering).

Number of Tenured/Tenure–Track Faculty by Engineering Discipline
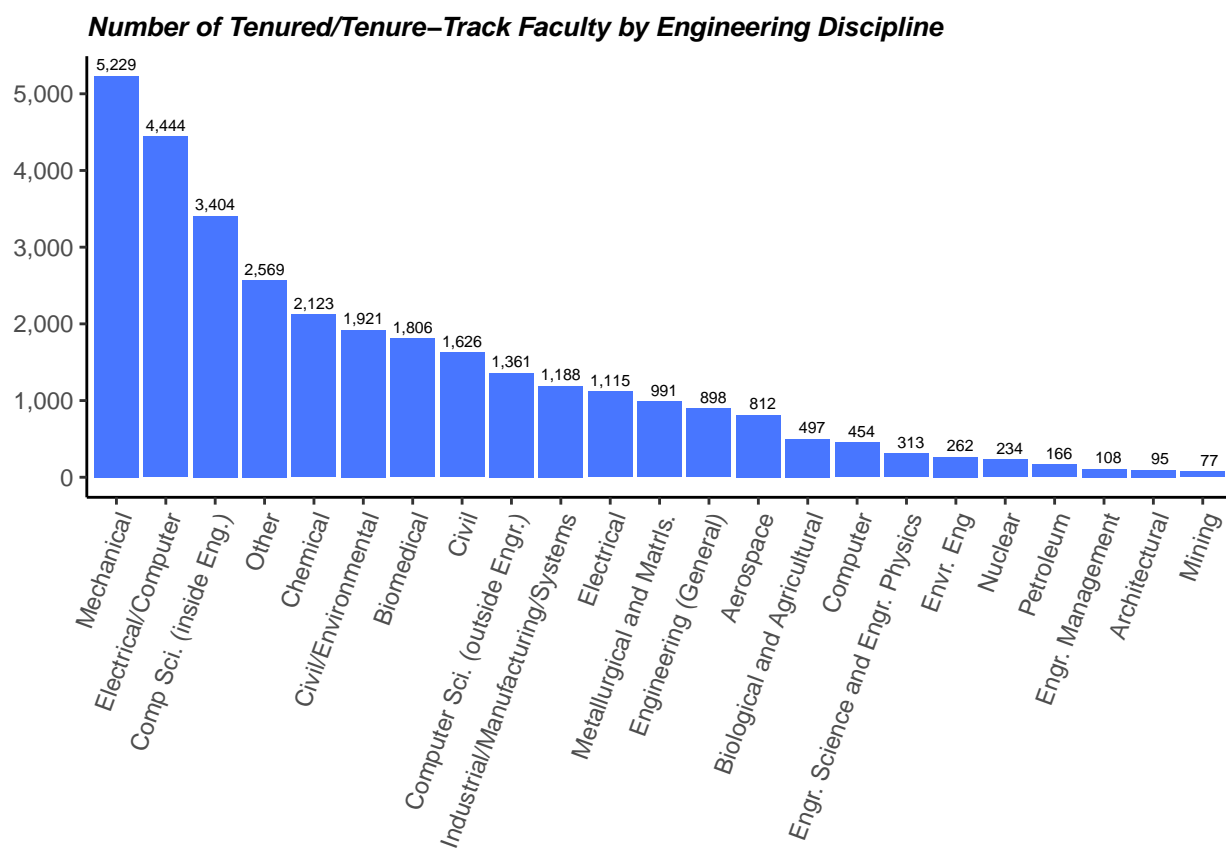
4.2 Percentage of Female Tenured/Tenure-Track Faculty by Discipline

Table 80: Percentage of Female Tenured/Tenure-Track Faculty by Discipline: 19.6 % of Total

Discipline Name	Percent Women
Biomedical	27.7%
Engr. Management	26.9%
Envr. Eng	26.3%
Engineering (General)	25.9%
Biological and Agricultural	24.9%
Other	23%
Chemical	22.7%
Civil/Environmental	22.6%
Industrial/Manufacturing/Systems	21.5%
Engr. Science and Engr. Physics	21.4%
Civil	21.3%
Metallurgical and Matrls.	20.8%
Computer	20.3%
Architectural	20%
Computer Sci. (outside Engr.)	19.5%
Mining	19.5%
Comp Sci. (inside Eng.)	19.1%
Petroleum	18.7%
Mechanical	15.7%
Electrical	15.3%
Electrical/Computer	15.2%
Nuclear	14.5%
Aerospace	12.9%

Percentage of Female Tenured/Tenure–Track Faculty by Discipline
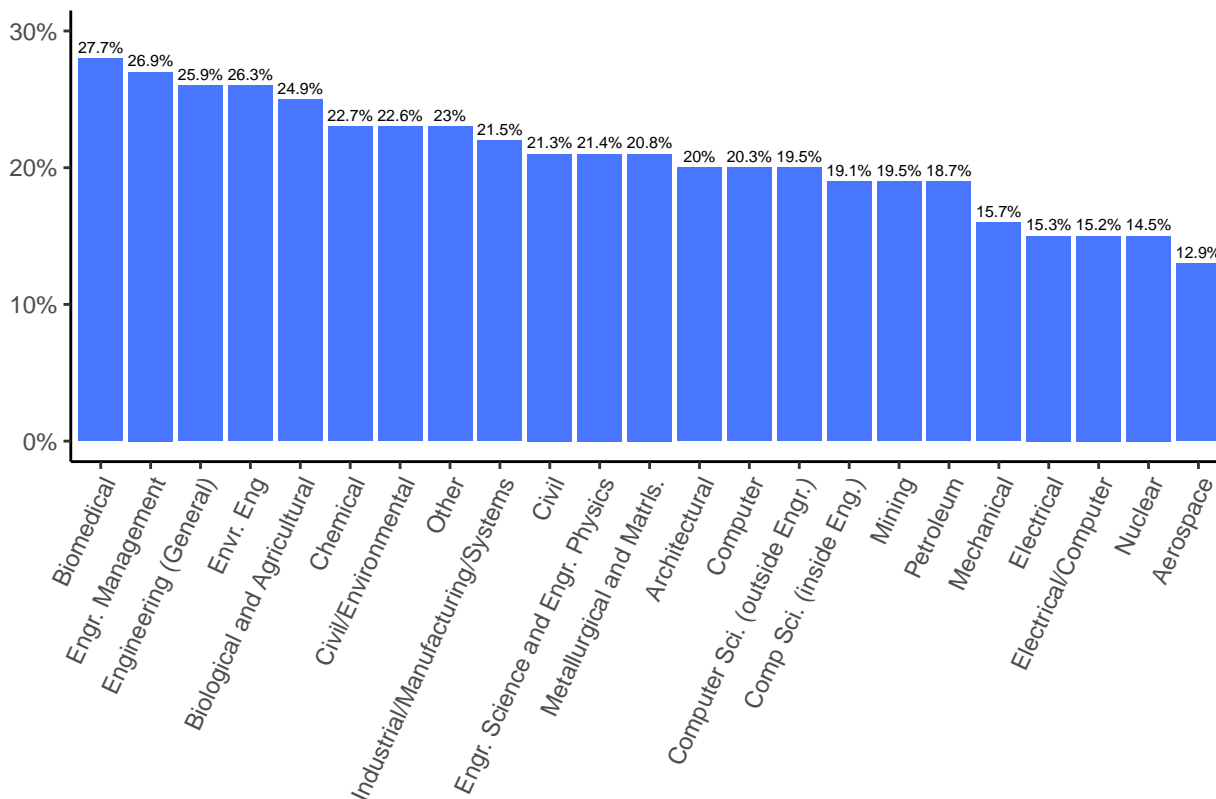
4.3 Top 50 Institutions by Number of Tenured/Tenure-Track Faculty

Table 81: Top 50 Institutions by Number of Tenured/Tenure-Track Faculty

No	Institutions	Number of Faculty
1	Georgia Institute of Technology	497
2	University of Illinois at Urbana-Champaign	451
3	Texas A&M University	441
3	University of Michigan	441
5	The Pennsylvania State University	425
6	Purdue University	413
7	Massachusetts Institute of Technology	396
8	Virginia Polytechnic Institute and State University	388
9	North Carolina State University	373
10	University of Florida	339
11	The University of Texas at Austin	336
12	Arizona State University	331
13	Carnegie Mellon University	329
14	University of California, Santa Barbara	324
15	Florida Atlantic University	316
16	The Johns Hopkins University	304

Table 81: Top 50 Institutions by Number of Tenured/Tenure-Track
Faculty *(continued)*

No	Institutions	Number of Faculty
17	University of Minnesota -Twin Cities	297
18	The Ohio State University	296
19	Stanford University	293
20	Concordia University, Montreal	289
21	University of Wisconsin-Madison	275
22	University of Washington in Seattle	272
23	Cornell University	270
24	University of Maryland, College Park	266
25	University of Notre Dame	261
26	University of Delaware	258
27	University of California, Berkeley	255
28	Northeastern University	251
29	Clemson University	248
29	Iowa State University	248
31	University of California, San Diego	242
32	Michigan State University	233
33	University of California, Irvine	228
34	University of Utah	226
35	Rensselaer Polytechnic Institute	225
36	Duke University	219
37	University of Colorado Boulder	216
38	Columbia University	210
39	Oregon State University	209
40	The University of Texas at Arlington	202
41	Northwestern University	200
42	University of California, Davis	199
42	University of Southern California	199
44	University of Massachusetts Amherst	195
45	University of Nebraska, Lincoln	193
46	Colorado School of Mines	189
46	University of Tennessee, Knoxville	189
48	University at Buffalo, SUNY	188
48	University of Arizona	188
48	University of California, Los Angeles	188

* 310 Institutions included

4.4 Top 20 Institutions by Number of Underrepresented Minorities Tenured/Tenure-Track Faculty

Table 82: Top 20 Institutions by Number of Underrepresented Mi-
norities Tenured/Tenure-Track Faculty

No	Institutions	Number of Faculty
1	University of Puerto Rico, Mayaguez Campus	151
2	North Carolina State University	102
3	Florida Atlantic University	45
4	Texas A&M University	44
5	University of Florida	43
6	Massachusetts Institute of Technology	39
7	University of Tennessee-Chattanooga	37
8	Purdue University	34
9	FAMU-FSU College of Engineering	32
10	Rochester Institute of Technology	31
10	Virginia Polytechnic Institute and State University	31
12	Howard University	30
13	The Pennsylvania State University	29
13	The University of Texas at El Paso	29
15	Georgia Institute of Technology	28
15	The University of Texas at San Antonio	28
17	University of Michigan	27
18	The Johns Hopkins University	25
18	The Ohio State University	25
20	The University of Texas at Austin	24

* 310 Institutions included

4.5 Top 20 Institutions by Percentage of Underrepresented Minorities Tenured/Tenure-Track Faculty

Table 83: Top 20 Institutions by Percentage of Underrepresented
Minorities Tenured/Tenure-Track Faculty

No	Institutions	Percent Underrepresented Minorities
1	University of Puerto Rico, Mayaguez Campus	92.1%
2	Virginia State University	60%
3	Howard University	51.7%
4	Morgan State University	50%
5	Jackson State University	31.2%
6	The University of Texas at El Paso	30.9%
7	Central State University	30.8%
8	North Carolina State University	27.3%
9	Rochester Institute of Technology	26.7%
10	University of Tennessee-Chattanooga	26.1%
11	Tuskegee University	25.8%
12	St. Mary's University	23.1%
13	Texas State University	22.2%
14	North Carolina A&T State University	22.1%
15	The University of Texas at Tyler	21.9%
16	FAMU-FSU College of Engineering	20.6%
17	Loyola University Chicago	20%
17	Winona State University	20%
19	The University of Texas at San Antonio	19.2%
20	The University of Texas Rio Grande Valley	19%

* 310 Institutions included

4.6 Number of Engineering Teaching Personnel by Rank

Table 84: Number of Engineering Teaching Personnel by Rank 97,909

Rank	Number of Faculty
Full Professor	15,208
Associate Professor	8,278
Assistant Professor	8,207
Non-Tenure-Track Personnel	44936
FTE of All PT Personnel	21,280

Number of Engineering Teaching Personnel by Rank
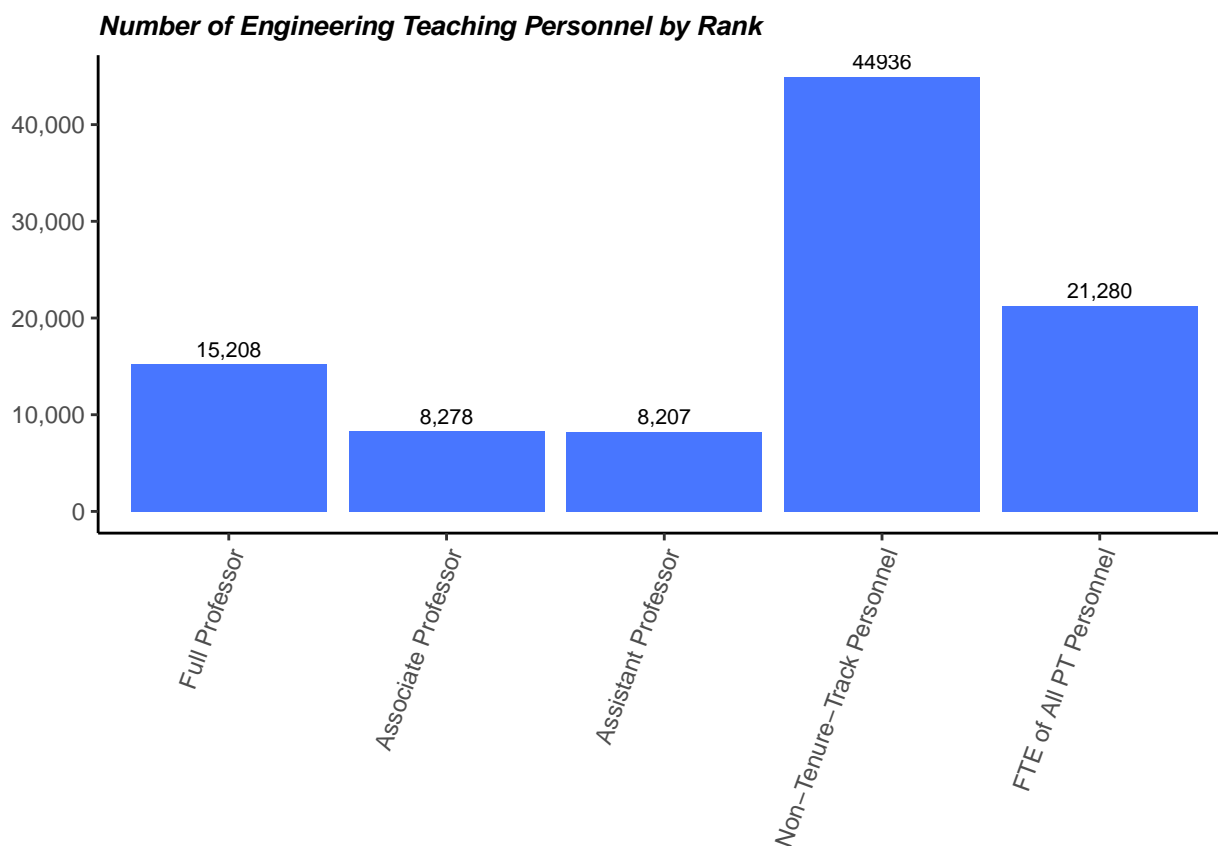
4.7 Percentage of Female Tenured/Tenure-Track Faculty by Rank

Table 85: Percentage of Female Tenured/Tenure-Track Faculty by Rank

Rank	Percent
All Faculty	19.6%
Full Professor	14.6%
Associate Professor	21.3%
Assistant Professor	27.3%

Percentage of Female Tenured/Tenure–Track Faculty by Rank
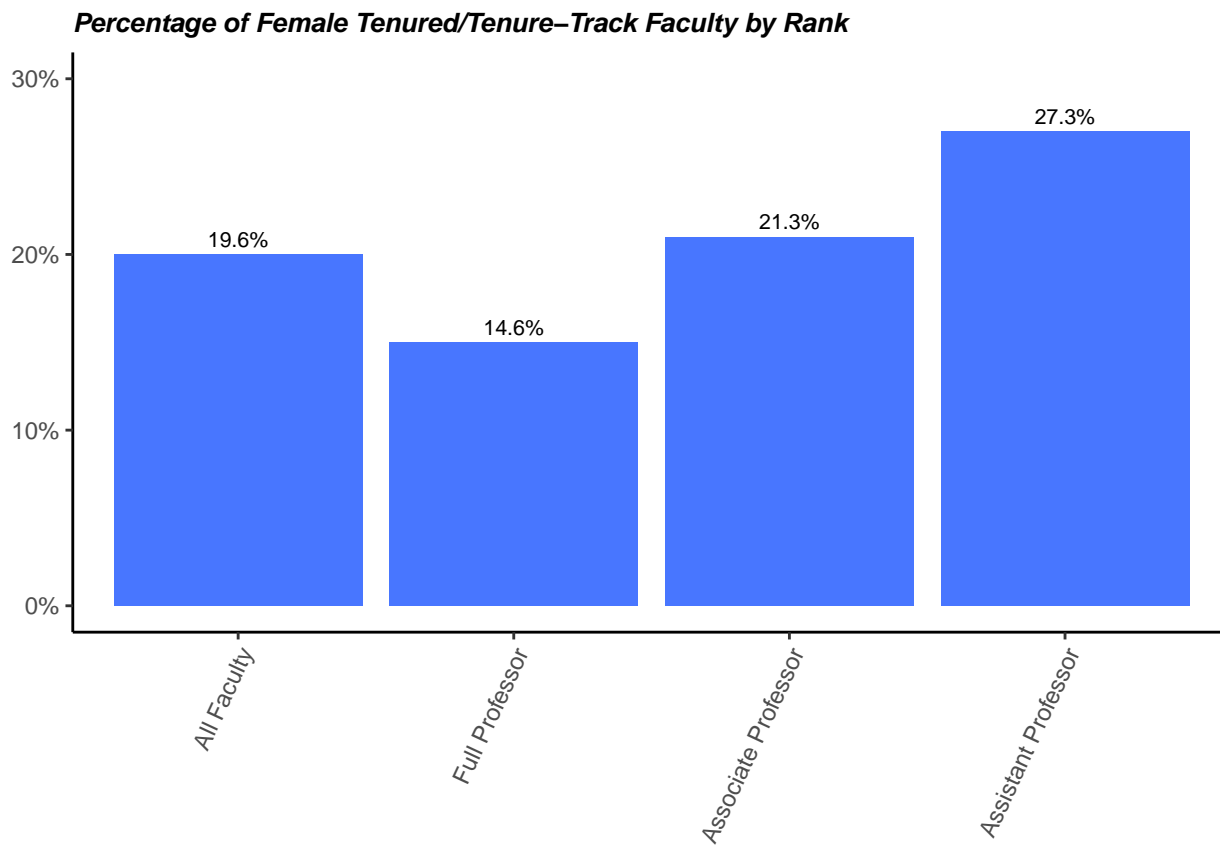
4.8 Top 50 Institutions with Highest Percentage of Female Tenured/Tenure Track Faculty

Table 86: Top 50 Institutions with Highest Percentage of Female Tenured Tenure Track Faculty

No	Institutions	Percent Women
1	Smith College	66.7%
1	Sweet Briar College	66.7%
3	Humboldt State University	62.5%
4	Cameron University	60%
4	Campbell University	60%
4	Saint Ambrose University	60%
7	Olin College of Engineering	52.5%
8	University of San Diego	43.8%
9	Swarthmore College	42.9%
10	Loyola University Chicago	40%
10	Seattle University	40%
12	University of Bridgeport	38.9%
13	Santa Clara University	35.8%
14	University of Portland	35%
15	University of Massachusetts Lowell	33.6%
16	Loyola Marymount University	33.3%
16	Mercer University	33.3%
16	Middle Tennessee State University	33.3%
16	University of Saint Thomas	33.3%
20	New York Institute of Technology	31.4%
21	California State University, Northridge	31.2%
21	Harvey Mudd College	31.2%
23	California Baptist University	31%
24	Rowan University	30%
25	California State University, Long Beach	29.7%
26	Roger Williams University	29.4%
27	Lafayette College	29.3%
28	Union College	29.2%
29	University of Maryland, Baltimore County	28.9%
30	Texas Christian University	28.6%
30	University of Washington-Tacoma	28.6%
32	University of Florida	28.3%
33	San Jose State University	28.1%
34	University of New Hampshire	28%
35	University of New Haven	27.8%
36	Howard University	27.6%
37	University of Washington in Seattle	27.6%
38	Oregon State University	27.3%
38	Stevens Institute of Technology	27.3%
40	Gannon University	26.9%
40	Trine University	26.9%
40	Valparaiso University	26.9%
43	The Citadel	26.7%
44	University of Detroit Mercy	26.3%
45	California State University, Los Angeles	26.1%
46	The Johns Hopkins University	26%
47	Hofstra University	25.9%
47	University of Colorado Boulder	25.9%
49	University of Wisconsin, Platteville	25.9%
50	Carnegie Mellon University	25.8%

[*] 310 Institutions included

4.9 Top 20 Institutions with Highest Number of Female Tenured/Tenure-Track Faculty

Table 87: Top 20 Institutions with Highest Number of Female Tenured/Tenure-Track Faculty

No	Institutions	Number of Faculty
1	University of Michigan	100
2	Georgia Institute of Technology	99
2	University of Illinois at Urbana-Champaign	99
4	University of Florida	96
5	Massachusetts Institute of Technology	87
6	The Pennsylvania State University	86
7	Carnegie Mellon University	85
8	The Johns Hopkins University	79
9	University of Washington in Seattle	75
10	Arizona State University	74
10	Texas A&M University	74
12	Virginia Polytechnic Institute and State University	73
13	Purdue University	71
14	The Ohio State University	69
14	The University of Texas at Austin	69
16	Stanford University	68
17	Cornell University	65
17	North Carolina State University	65
19	University of California, Santa Barbara	63
20	Northeastern University	62

* 310 Institutions included

4.10 Percentage of Women and Minority Faculty Members

Table 88: Percentage of Women and Minority Faculty Members

Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Women	13.2%	13.8%	14.0%	14.5%	15.2%	15.7%	16.3%	17.0%	17.6%	18.1%	18.6%
Black or Afr. American	2.5%	2.5%	2.7%	2.6%	2.5%	2.5%	2.3%	3.1%	2.4%	2.5%	2.5%
Asian	23.9%	24.1%	24.6%	25.2%	25.6%	26.9%	27.6%	26.0%	28.3%	28.7%	28.9%
Hispanic	3.6%	3.7%	3.9%	3.6%	3.9%	3.9%	3.7%	5.1%	3.8%	3.7%	3.9%

* Includes faculty data from University of Puerto Rico, Mayaguez.

Percentage of Women and Minority Faculty Members 2010–2020*
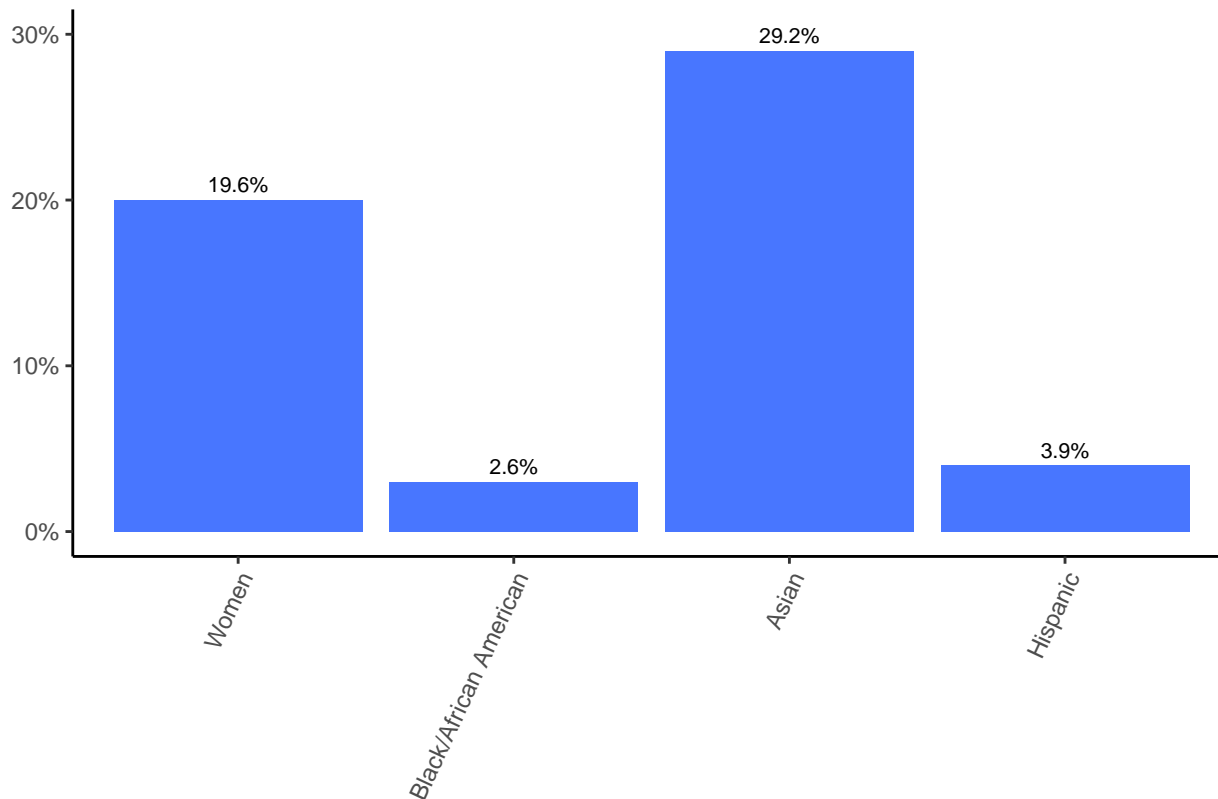
4.11 Number of Full Professors by Race/Ethnicity

Table 89: Number of Full Professors by Race/Ethnicity: 14,544

Ethnicity	Number of Faculty
White	8,414
Asian	4,163
Unknown	892
Hispanic	579
Black or Afr. American	305
Multiracial	61
American Indian	51
Hawaiian/Pac.Isl	79

* Includes 129 Faculty from Institutions in Puerto Rico.

* Computer Science(Outside Engineering) has been removed

Number of Full Professors by Race/Ethnicity
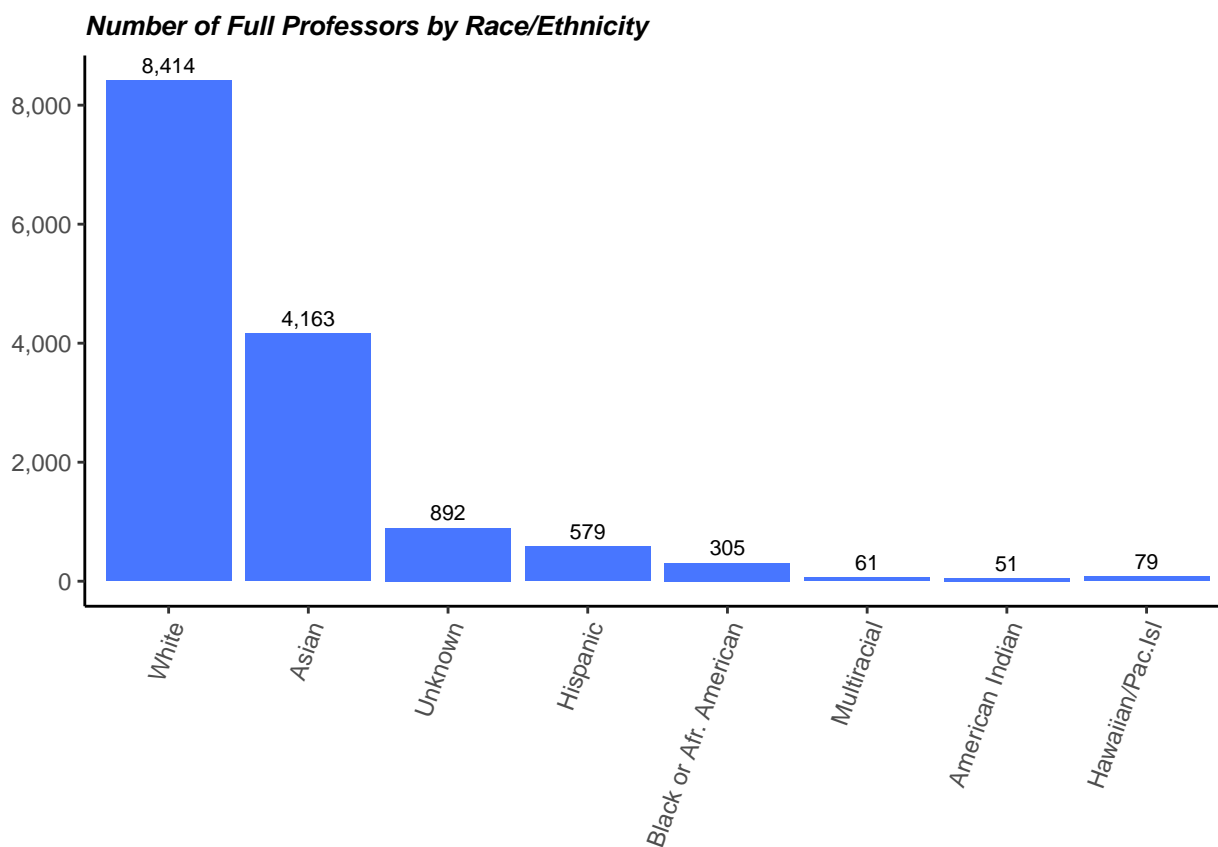
4.12 Number of Associate Professors by Race/Ethnicity

Table 90: Number of Associate Professors by Race/Ethnicity: 7,780

Ethnicity	Number of Faculty
White	4,223
Asian	2,358
Unknown	520
Hispanic	319
Black or Afr. American	234
Multiracial	79
American Indian	34
Hawaiian/Pac.Isl	13

* Includes 15 Faculty from Institutions in Puerto Rico.

* Computer Science(Outside Engineering) has been removed

Number of Associate Professors by Race/Ethnicity
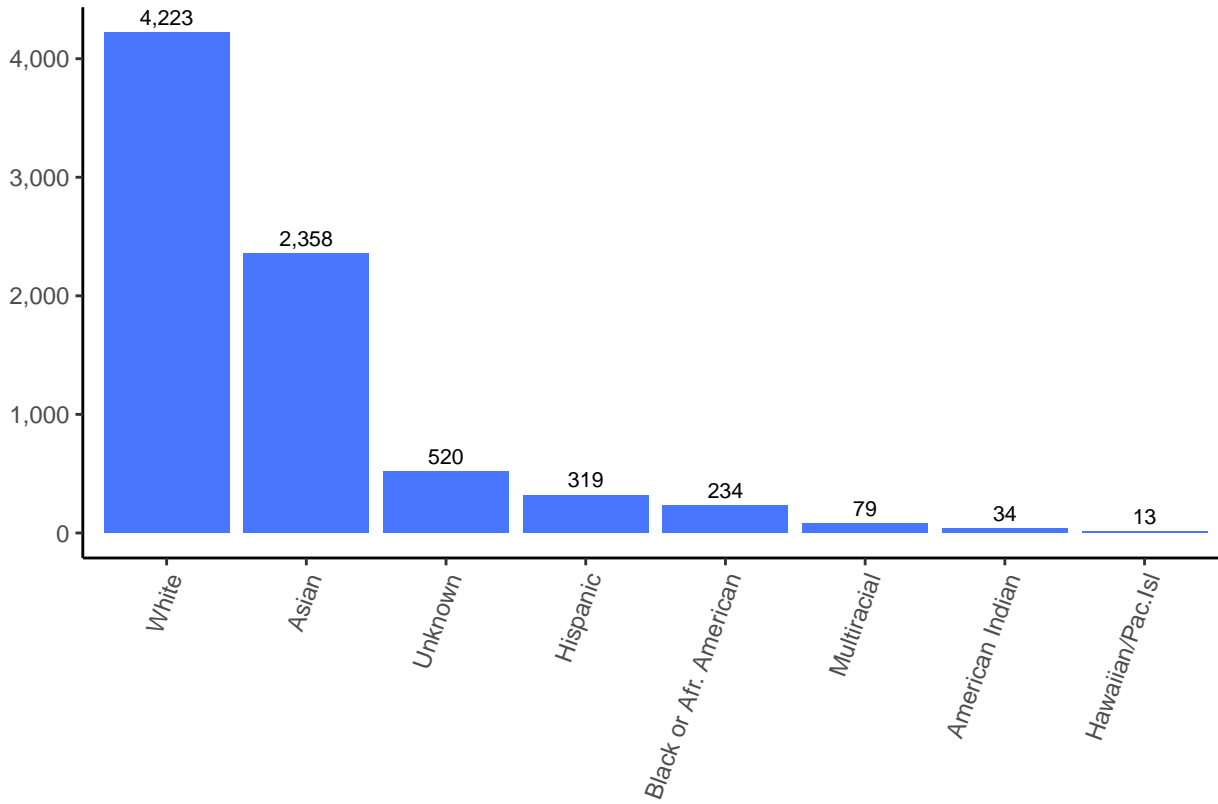
4.13 Number of Assistant Professors by Race/Ethnicity

Table 91: Number of Assistant Professors by Race/Ethnicity: 6,970

Ethnicity	Number of Faculty
White	3,213
Asian	2,351
Unknown	717
Hispanic	312
Black or Afr. American	259
Multiracial	92
American Indian	21
Hawaiian/Pac.Isl	5

* Includes 20 Faculty from Institutions in Puerto Rico.
* Computer Science(Outside Engineering) has been removed

Number of Assistant Professors by Race/Ethnicity
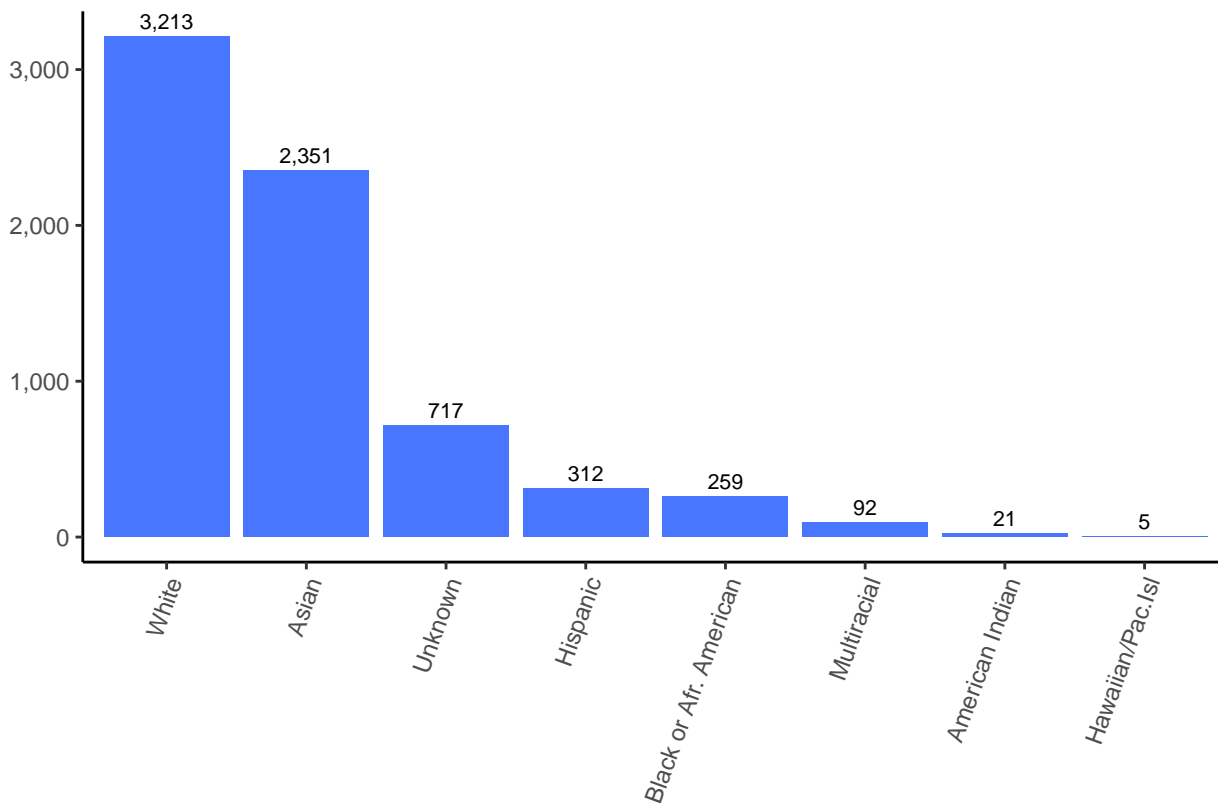
4.14 Percentage of Black/African American Tenured/Tenure-Track Faculty by Rank

Table 92: Percentage of Black/African American Tenured/Tenure-Track Faculty by Rank

Rank	Percent
All Faculty	2.6%
Full Professor	2%
Associate Professor	2.9%
Assistant Professor	3.2%

Percentage of African American Tenured/Tenure–Track Faculty by Rank
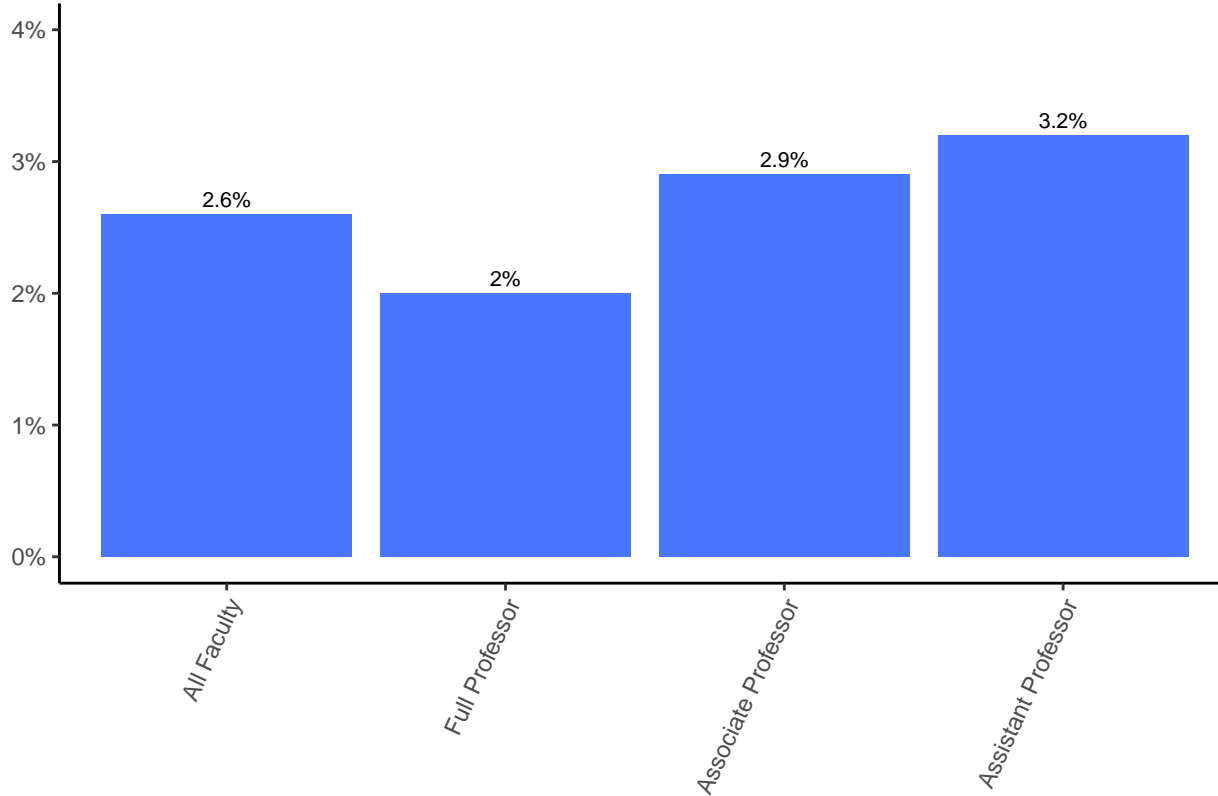
4.15 Percentage of Asian Tenured/Tenure-Track Faculty by Rank

Table 93: Percentage of Asian Tenured/Tenure-Track Faculty by Rank

Rank	Percent
All Faculty	29.2%
Full Professor	28.4%
Associate Professor	29.6%
Assistant Professor	30.2%

Percentage of Asian Tenured/Tenure–Track Faculty by Rank
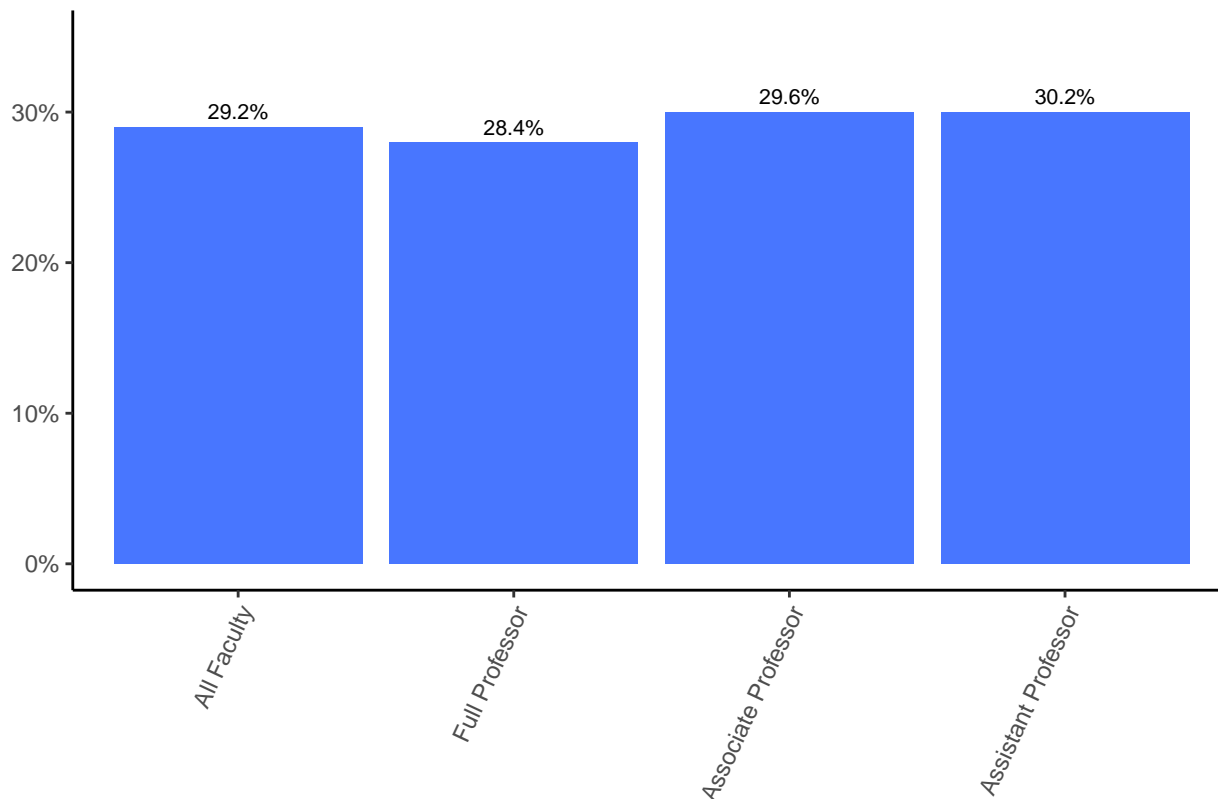
4.16 Percentage of Hispanic Tenured/Tenure-Track Faculty by Rank

Table 94: Percentage of Hispanic Tenured/Tenure-Track Faculty by Rank

Rank	Percent
All Faculty	3.9%
Full Professor	3.9%
Associate Professor	4%
Assistant Professor	3.9%

Percentage of Hispanic Tenured/Tenure–Track Faculty by Rank
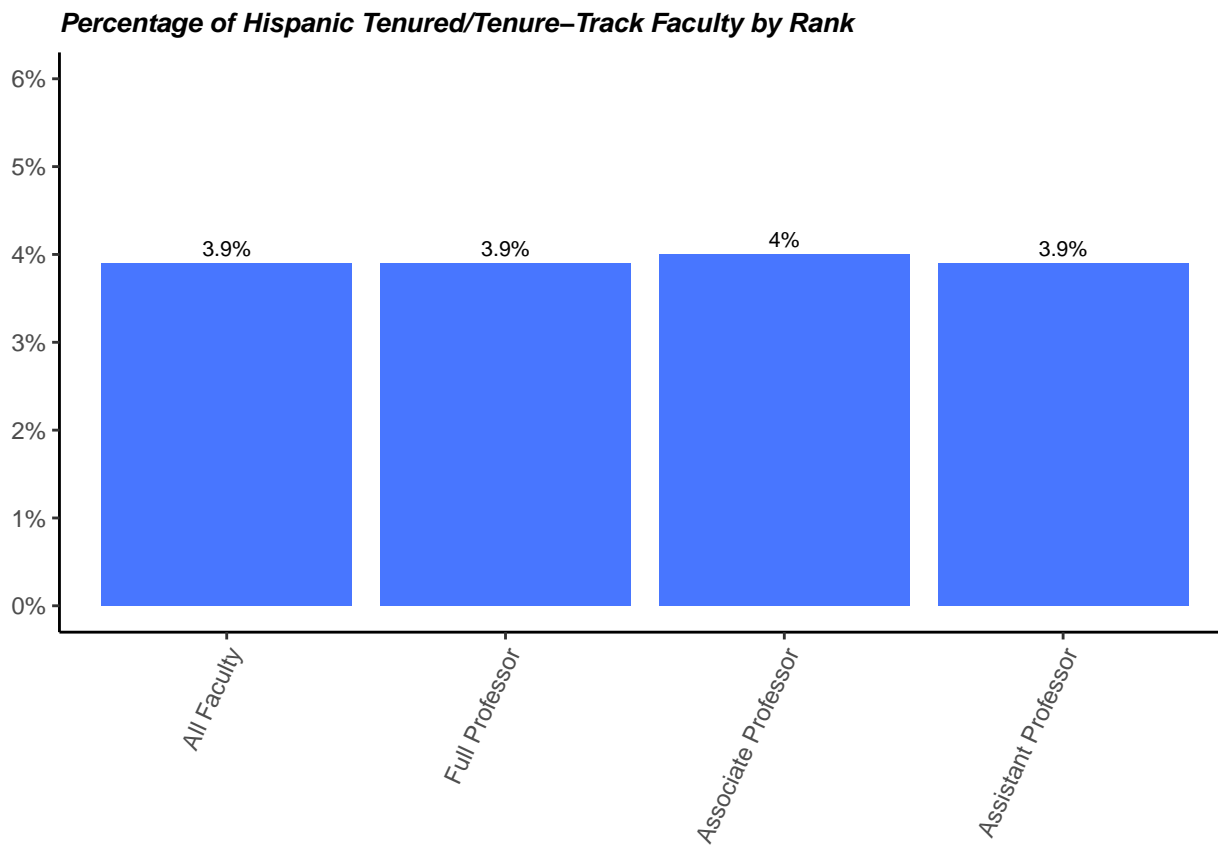
4.17 African American Tenured/Tenure Track Faculty by Institutions

Table 95: African American Tenured/Tenure Track Faculty by Institutions

No	Institutions	Number of Faculty
1	University of Tennessee-Chattanooga	29
2	FAMU-FSU College of Engineering	23
2	Howard University	23
4	University of Florida	22
5	Morgan State University	18
6	Georgia Institute of Technology	17
7	North Carolina A&T State University	16
8	The Johns Hopkins University	15
8	University of Michigan	15
10	Massachusetts Institute of Technology	14
10	Virginia Polytechnic Institute and State University	14
12	The Ohio State University	12
13	Texas A&M University	11
13	University of Delaware	11
15	Carnegie Mellon University	10
15	Florida Atlantic University	10
15	Purdue University	10
15	Stanford University	10
15	University of California, Irvine	10
20	Cornell University	9

* 310 Institutions included

4.18 Asian Tenured/Tenure Track Faculty by Institutions

Table 96: Asian Tenured/Tenure Track Faculty by Institutions

No	Institutions	Number of Faculty
1	Georgia Institute of Technology	170
2	Purdue University	151
3	Texas A&M University	150
4	Florida Atlantic University	147
5	University of Illinois at Urbana-Champaign	138
6	University of Michigan	109
7	The University of Texas at Arlington	108
8	Iowa State University	103
8	Virginia Polytechnic Institute and State University	103
10	Michigan State University	99
10	The University of Texas at Austin	99
12	The Ohio State University	98
13	University of California, Los Angeles	97
14	University at Buffalo, SUNY	94
15	Rensselaer Polytechnic Institute	92
15	University of California, San Diego	92
15	University of Connecticut	92
18	Arizona State University	91
18	The Pennsylvania State University	91
18	University of Florida	91

* 310 Institutions included

4.19 Hispanic Tenured/Tenure Track Faculty by Institutions

Table 97: Hispanic Tenured/Tenure Track Faculty by Institutions

| No	Institutions	Number of Faculty
1	University of Puerto Rico, Mayaguez Campus	149
2	Florida Atlantic University	35
3	Texas A&M University	32
4	The University of Texas at El Paso	28
5	Massachusetts Institute of Technology	25
5	The University of Texas at San Antonio	25
7	Purdue University	23
8	University of Florida	21
9	The Pennsylvania State University	20
10	University of Illinois at Urbana-Champaign	18
11	University of California, San Diego	17
12	Rochester Institute of Technology	16
12	The University of Texas at Austin	16
14	University of Notre Dame	14
14	Virginia Polytechnic Institute and State University	14
16	The Ohio State University	13
16	University of Colorado Boulder	13
18	University of California, Irvine	12
18	University of Michigan	12
20	Arizona State University	11

* 310 Institutions included

4.20 Percentage of African American Tenured/Tenure-Track Faculty by Discipline

Table 98: Percentage of African American Tenured/Tenure-Track Faculty by Discipline: 2.6 % of Total

Discipline Name	Percentage
Engr. Management	7.4%
Biological and Agricultural	4.6%
Computer	4.4%
Mining	3.9%
Engineering (General)	3.5%
Civil/Environmental	3.3%
Industrial/Manufacturing/Systems	3.1%
Other	3.1%
Biomedical	3%
Electrical	2.7%
Envr. Eng	2.7%
Aerospace	2.6%
Civil	2.6%
Mechanical	2.5%
Petroleum	2.4%
Chemical	2.3%
Electrical/Computer	2.3%
Metallurgical and Matrls.	2.3%
Comp Sci. (inside Eng.)	1.7%
Engr. Science and Engr. Physics	1.6%
Nuclear	1.3%
Architectural	1.1%
Computer Sci. (outside Engr.)	1.1%

Percentage of African American Tenured/Tenure–Track Faculty by Discipline
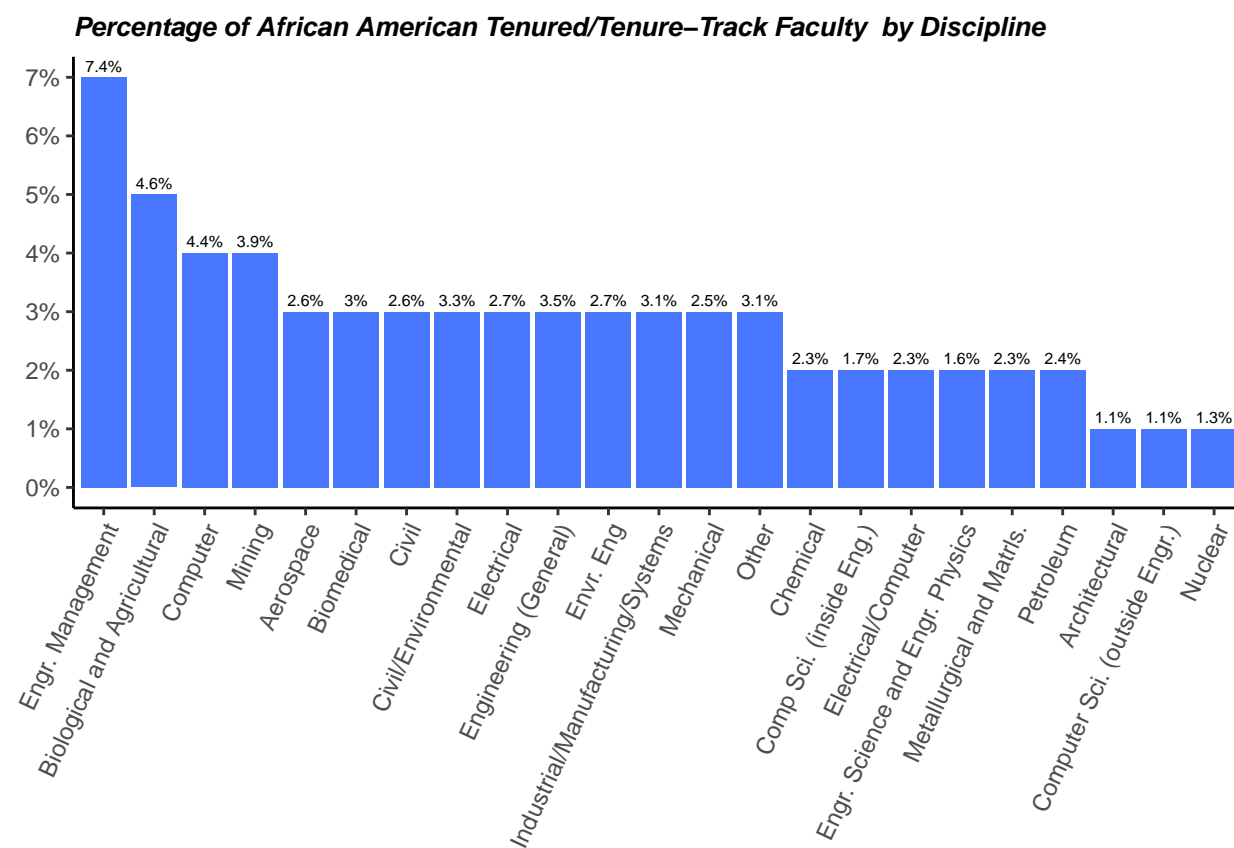
4.21 Percentage of Hispanic Tenured/Tenure-Track Faculty by Discipline

Table 99: Percentage of Hispanic Tenured/Tenure-Track Faculty by Discipline: 3.9 % of Total

Discipline Name	Percentage
Metallurgical and Matrls.	6.2%
Envr. Eng	6.1%
Civil	6%
Engr. Management	5.6%
Civil/Environmental	5.4%
Chemical	5.3%
Industrial/Manufacturing/Systems	5.3%
Other	5.3%
Computer	5.1%
Architectural	4.2%
Petroleum	4.2%
Biomedical	3.6%
Engineering (General)	3.6%
Electrical/Computer	3.4%
Aerospace	3.3%
Mechanical	3.3%
Biological and Agricultural	3.2%
Engr. Science and Engr. Physics	3.2%
Nuclear	3%
Electrical	2.8%
Computer Sci. (outside Engr.)	2.3%
Comp Sci. (inside Eng.)	2.1%
Mining	0%

Percentage of Hispanic Tenured/Tenure–Track Faculty by Discipline

4.22 Percentage of Asian Tenured/Tenure-Track Faculty by Discipline

Table 100: Percentage of Asian Tenured/Tenure-Track Faculty by Discipline: 29.2 % of Total

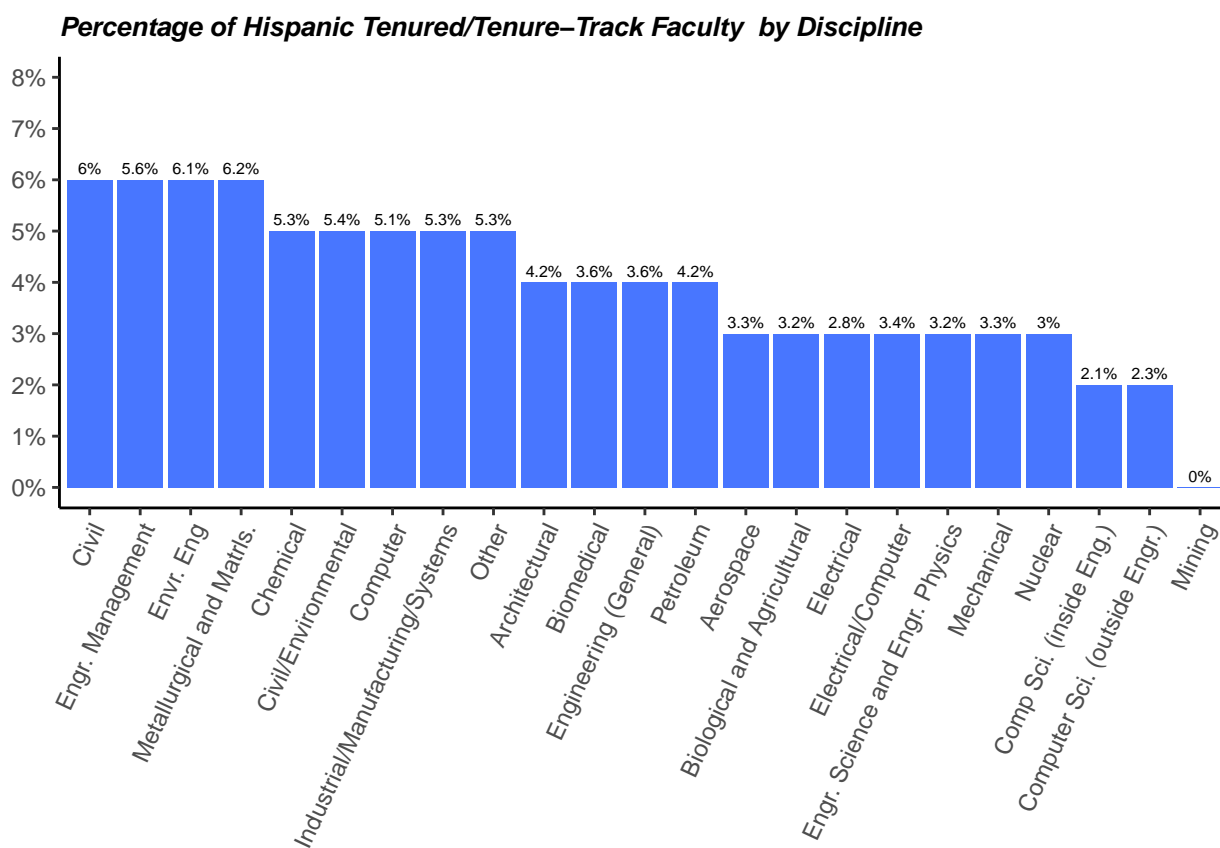| Discipline Name	Percentage
Computer	35.5%
Electrical	34.6%
Comp Sci. (inside Eng.)	34.4%
Industrial/Manufacturing/Systems	33.8%
Electrical/Computer	33.5%
Mechanical	30.9%
Metallurgical and Matrls.	28.2%
Computer Sci. (outside Engr.)	28.1%
Biomedical	27.6%
Petroleum	27.1%
Other	26.7%
Biological and Agricultural	26.4%
Civil/Environmental	25.6%
Engineering (General)	25.3%
Aerospace	25.1%
Nuclear	24.4%
Chemical	23.7%
Civil	23.6%
Engr. Management	20.4%
Mining	19.5%
Architectural	18.9%
Envr. Eng	16.8%
Engr. Science and Engr. Physics	12.8%

Percentage of Asian Tenured/Tenure–Track Faculty by Discipline
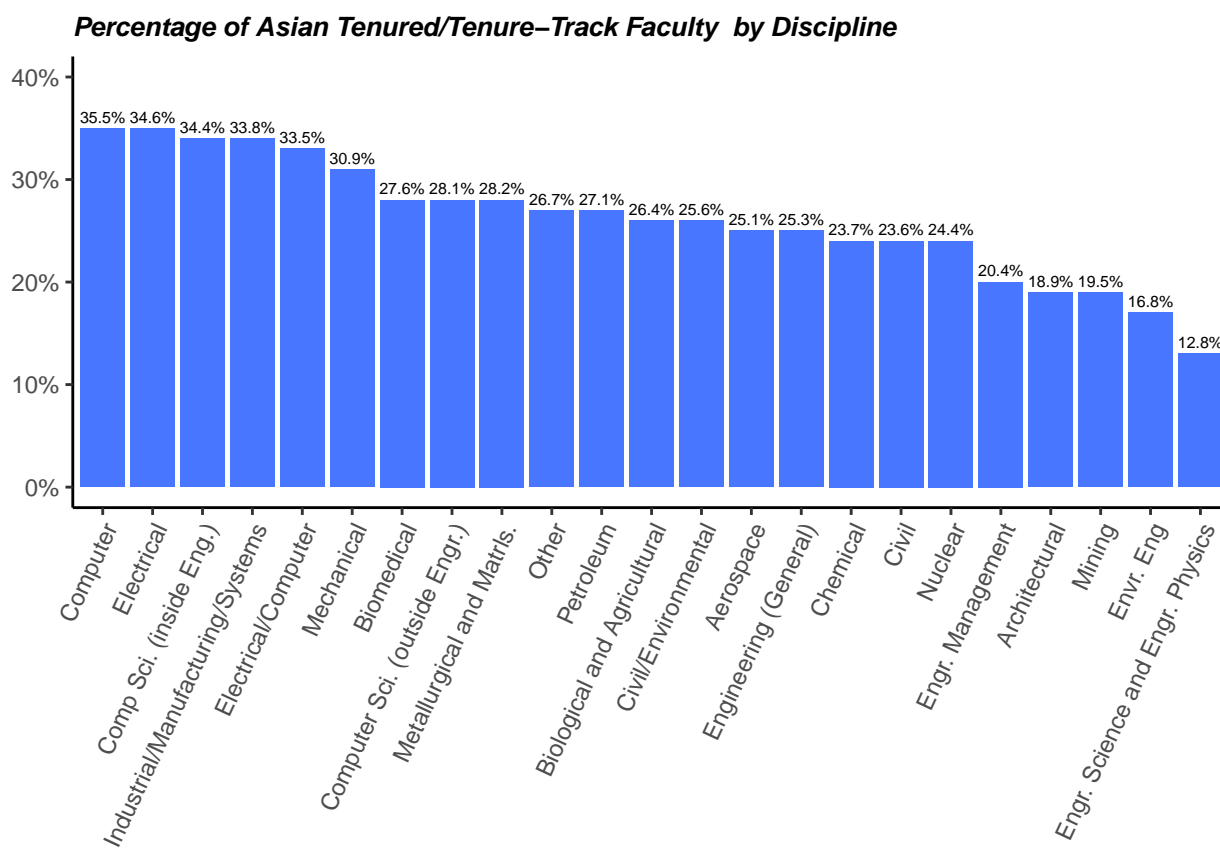
5 ENGINEERING RESEARCH EXPENDITURES

5.1 Top 50 Research Expenditure by Institutions

Table 101: Top 50 Research Expenditure by Institutions

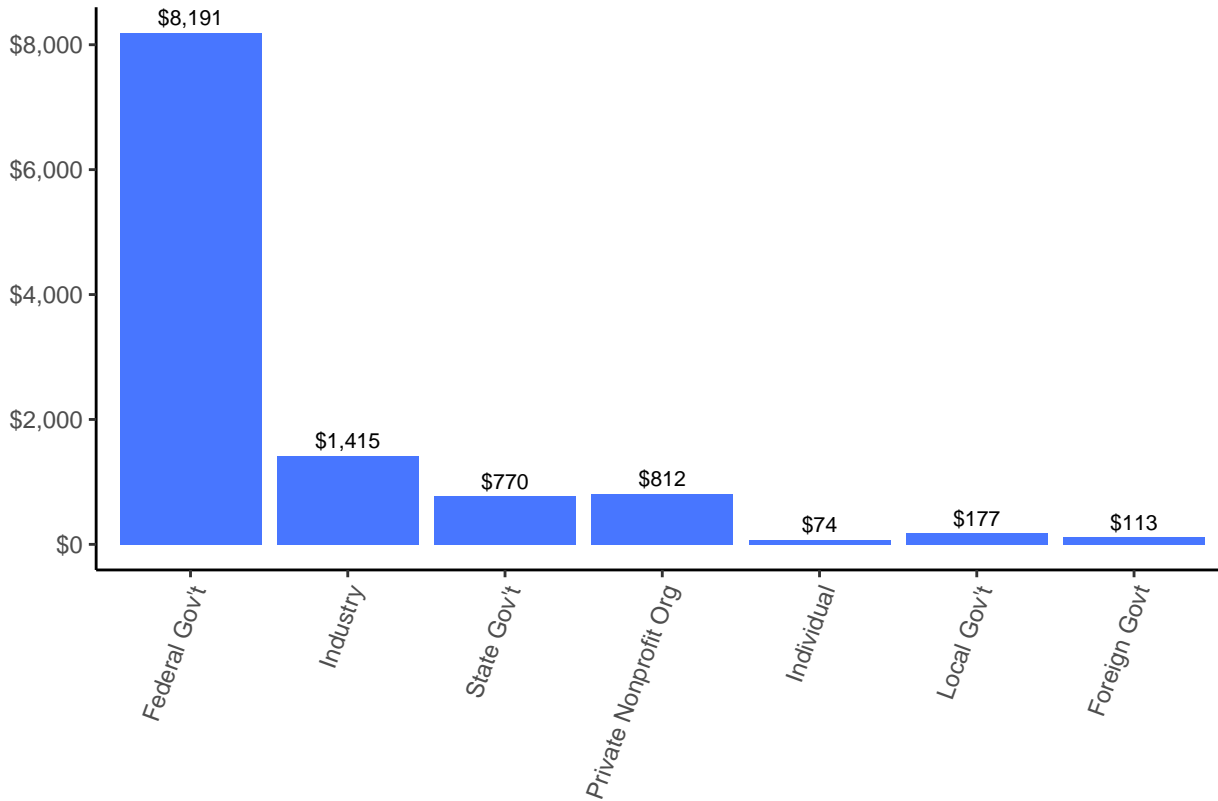| No	Institution	Expenditure(IN MILLIONS)
1	Massachusetts Institute of Technology	$457.4
2	Texas A&M University	$390.7
3	The University of Texas at Austin	$357.9
4	Purdue University	$340.4
5	Georgia Institute of Technology	$335
6	University of Michigan	$319.6
7	Carnegie Mellon University	$301.8
8	University of Illinois at Urbana-Champaign	$257.6
9	University of California, San Diego	$244.7
10	University of California, Berkeley	$240.1
11	Stanford University	$239
12	The Johns Hopkins University	$212
13	University of Maryland, College Park	$212
14	University of Dayton	$207.4
15	North Carolina State University	$203.4
16	University of Delaware	$188.4
17	University of Colorado Boulder	$184.6
18	University of Southern California	$182.4
19	Wichita State University	$177.4
20	Northwestern University	$166
21	The Ohio State University	$162.4
22	Duke University	$160.4
23	Cornell University	$151.9
24	University of Wisconsin-Madison	$149.6
25	Virginia Polytechnic Institute and State University	$141.4
26	The Pennsylvania State University	$139.5
27	Arizona State University	$136
28	University of California, Irvine	$127
29	University of Pennsylvania	$124.5
30	University of Rochester	$123.4
31	Boston University	$121.8
32	University of Pittsburgh	$114.6
33	University of Minnesota -Twin Cities	$112.3
34	Iowa State University	$108
35	University of California, Davis	$105.3
36	University of California, Los Angeles	$104
37	University of Florida	$99.2
38	University of California, Santa Barbara	$95.3
39	University at Buffalo, SUNY	$94.5
40	Colorado State University	$94
41	University of Virginia	$94
42	Princeton University	$91.7
43	University of Utah	$90.5
44	Auburn University	$86
45	University of Tennessee, Knoxville	$85.9
46	Northeastern University	$82.8
47	William Marsh Rice University	$81
48	Vanderbilt University	$77.1
49	New Jersey Institute of Technology	$74.7
50	The University of Alabama in Huntsville	$74.6

[*] 183 Institutions included

5.2 Research Expenditures by Source in Millions of Dollars

Table 102: Research Expenditures by Source in Millions of Dollars: $11,551

Expenditure	Amount
Federal Gov't	$8,191
Industry	$1,415
State Gov't	$770
Private Nonprofit Org	$812
Individual	$74
Local Gov't	$177
Foreign Govt	$113

68

Research Expenditures by Source in Millions of Dollars:

Federal Gov't: $8,191
Industry: $1,415
State Gov't: $770
Private Nonprofit Org: $812
Individual: $74
Local Gov't: $177
Foreign Govt: $113

5.3 Computer Science Research Expenditures Located Outside of Engineering by Institutions

Table 103: Computer Science Research Expenditures Outside of Engineering by Institution

No	Institution	Expenditure(IN MILLIONS)
1	Carnegie Mellon University	$155
2	The University of Texas at Austin	$56.7
3	Georgia Institute of Technology	$37.4
4	The University of Alabama in Huntsville	$35.1
5	University of Maryland, College Park	$32.3
6	University of California, Irvine	$29.5
7	University of Wisconsin-Madison	$22.9
8	Northeastern University	$22.7
9	University of Massachusetts Amherst	$21.6
10	Purdue University	$16.6
11	Rutgers, The State University of New Jersey, School of Engineering	$11
12	Rensselaer Polytechnic Institute	$10.4
13	Brown University	$10
14	Colorado State University	$9
15	Worcester Polytechnic Institute	$8.3
16	Duke University	$6.3
17	Dartmouth College	$5.3
18	Boston University	$5.1
19	The University of Memphis	$5.1
20	The University of Texas at San Antonio	$4.8

* 35 Institutions included

6 CANADIAN ENGINEERING

6.1 Engineering Bachelor's Degree by Canadian Institutions

Table 104: Engineering Bachelor's Degree by Canadian Institutions

No	Institutions	Degrees Awarded
1	University of Waterloo	1,465
2	Concordia University, Montreal	1,033
3	University of British Columbia	853
4	McMaster University	763
5	University of Calgary	691
6	The University of Western Ontario	439

6.2 Engineering Master's Degree by Canadian Institutions

Table 105: Engineering Master's Degree by Canadian Institutions

No	Institutions	Degrees Awarded
1	Concordia University, Montreal	892
2	University of Waterloo	678
3	University of Calgary	425
4	McMaster University	280
5	University of British Columbia	214

6.3 Engineering Doctoral Degree by Canadian Institutions

Table 106: Engineering Doctoral Degree by Canadian Institutions

No	Institutions	Degrees Awarded
1	University of Waterloo	131
2	McMaster University	89
3	Concordia University, Montreal	83
4	University of Calgary	61
5	University of British Columbia	37

6.4 Bachelor's Degrees Awarded by Gender- Canadian Institutions

Table 107: Bachelor's Degrees Awarded by Gender- Canadian Institutions

Gender	Percentage
Female	26.8%
Male	73.2%

Bachelor's Degrees Awarded by Gender– Canadian Institutions
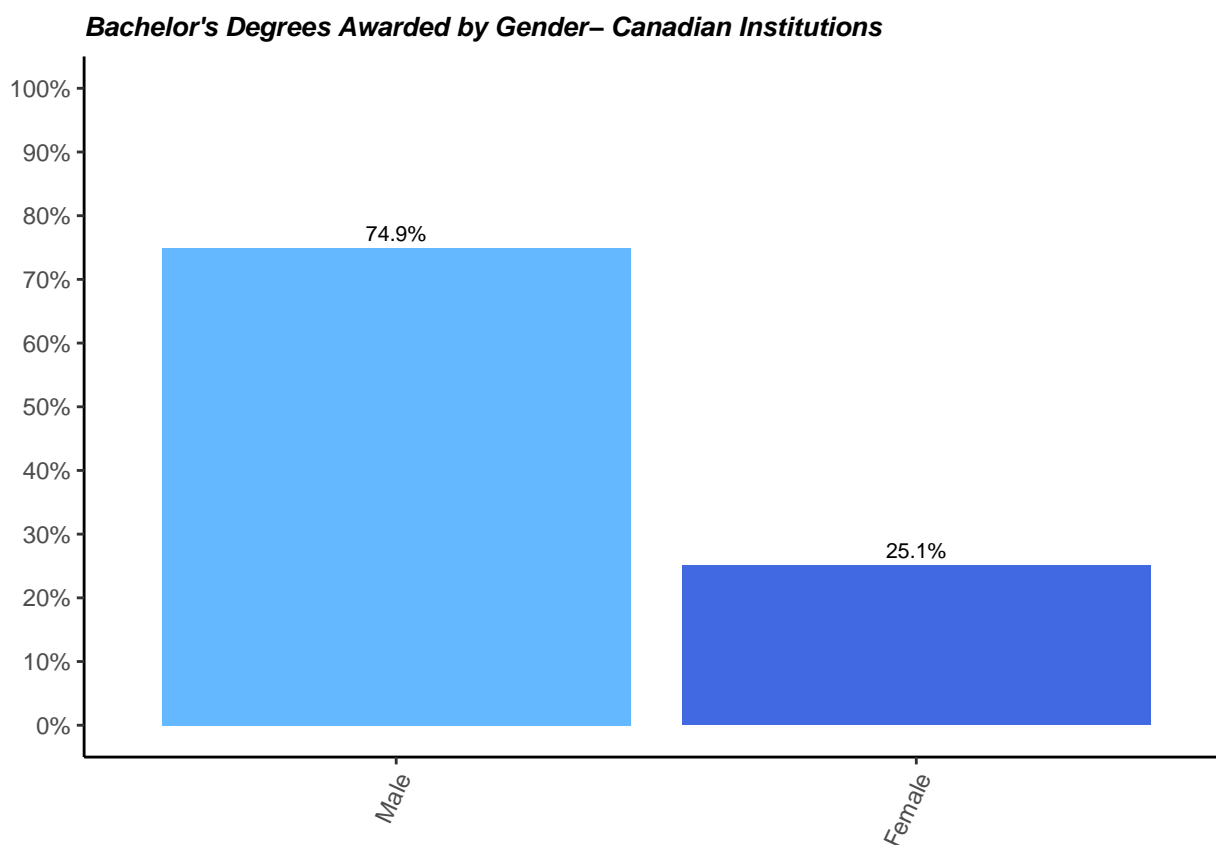
6.5 Master's Degrees Awarded by Gender- Canadian

Table 108: Master's Degrees Awarded by Gender- Canadian Institutions

Gender	Percentage
Female	30.2%
Male	69.8%

Master's Degrees Awarded by Gender– Canadian Institutions

71.3%

28.7%
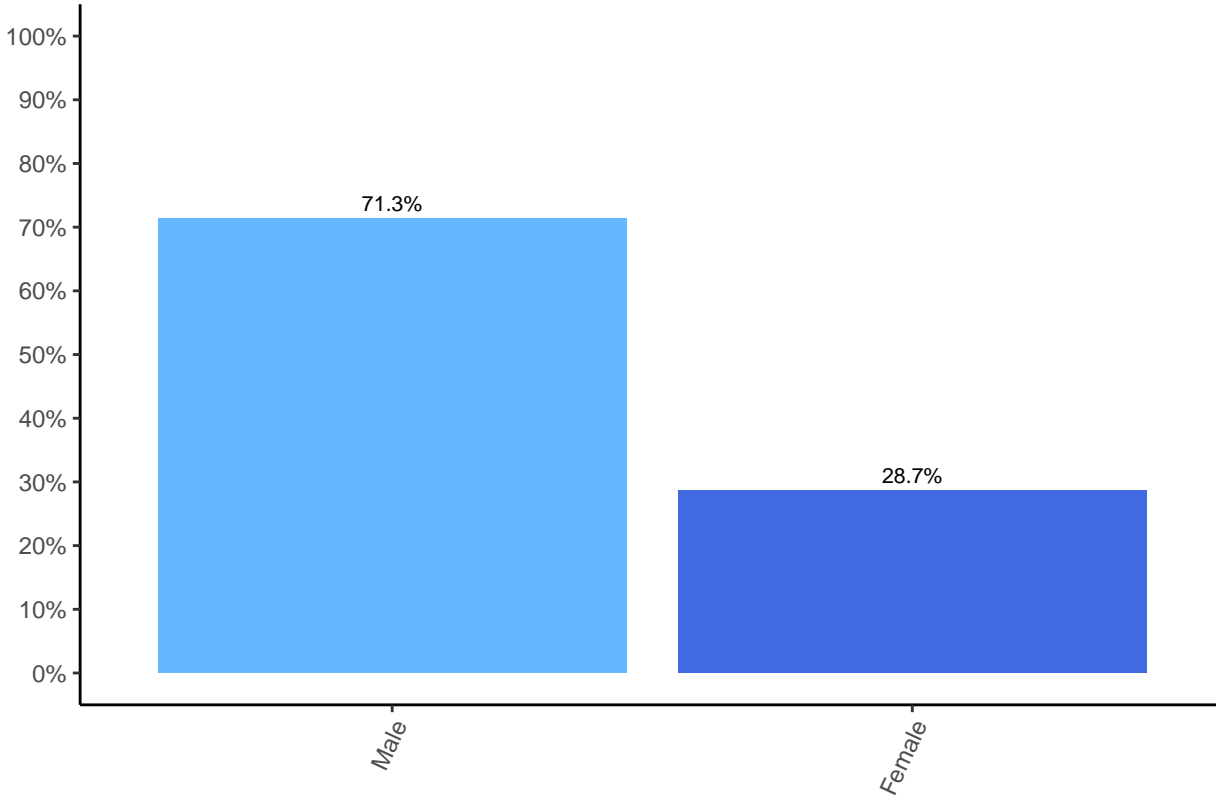
Male

Female

6.6   Doctoral Degrees Awarded by Gender- Canadian Institutions

Table 109: Doctoral Degrees Awarded by Gender- Canadian Institutions

Gender	Percentage
Female	25.5%
Male	74.5%

Doctoral Degrees Awarded by Gender– Canadian Institutions

72.7%

27.3%

Male

Female
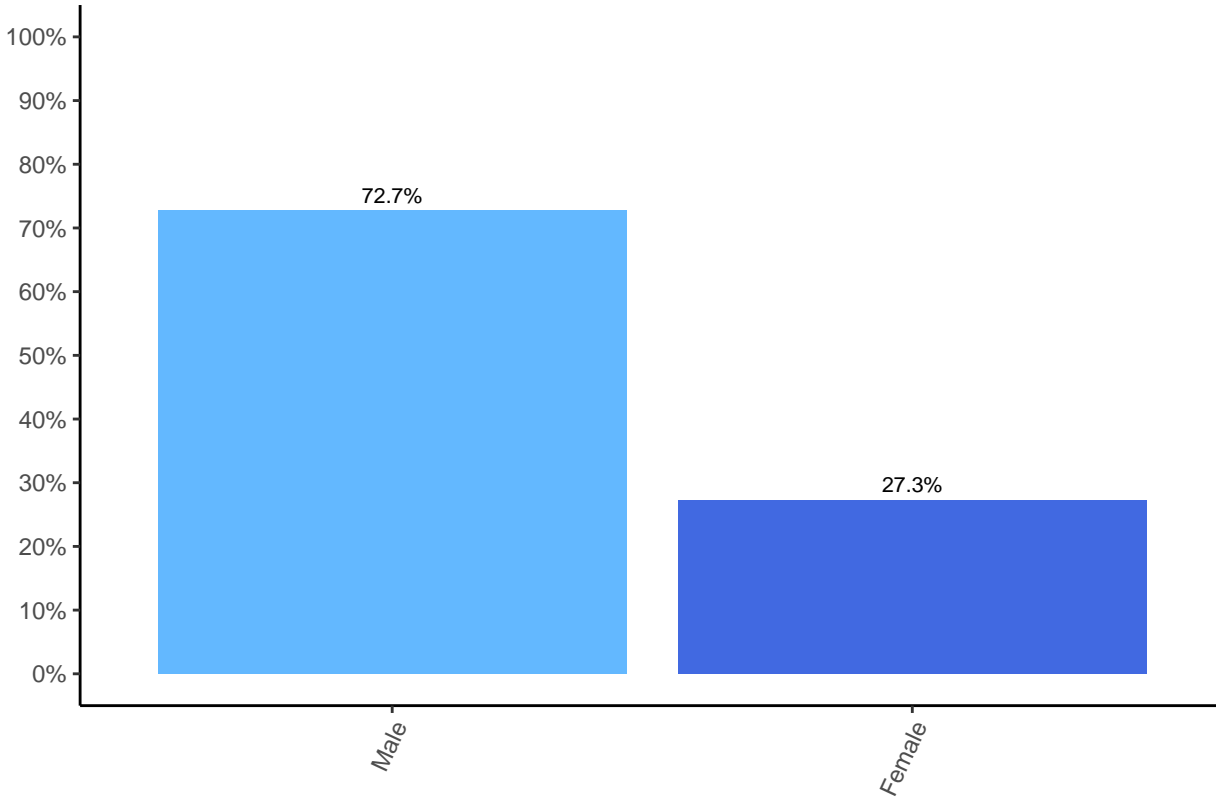
6.7 Tenured/Tenure-Track Faculty Members by Institutions

Table 110: Tenured/Tenure-Track Faculty Members by Institutions

No	Institutions	Degrees Awarded
1	University of Waterloo	276
2	University of British Columbia	233
3	University of Calgary	162
4	McMaster University	154

6.8 Percentage of Female Tenured/Tenure-Track Faculty by Rank- Canadian Institutions

Table 111: Doctoral Enrollment by Race and Ethnicity*

Rank	Percent
All Faculty	19%
Full Professor	12.8%
Associate Professor	22.7%
Assistant Professor	32%

Percentage of Female Tenured/Tenure–Track Faculty by Rank– Canadian Institutions
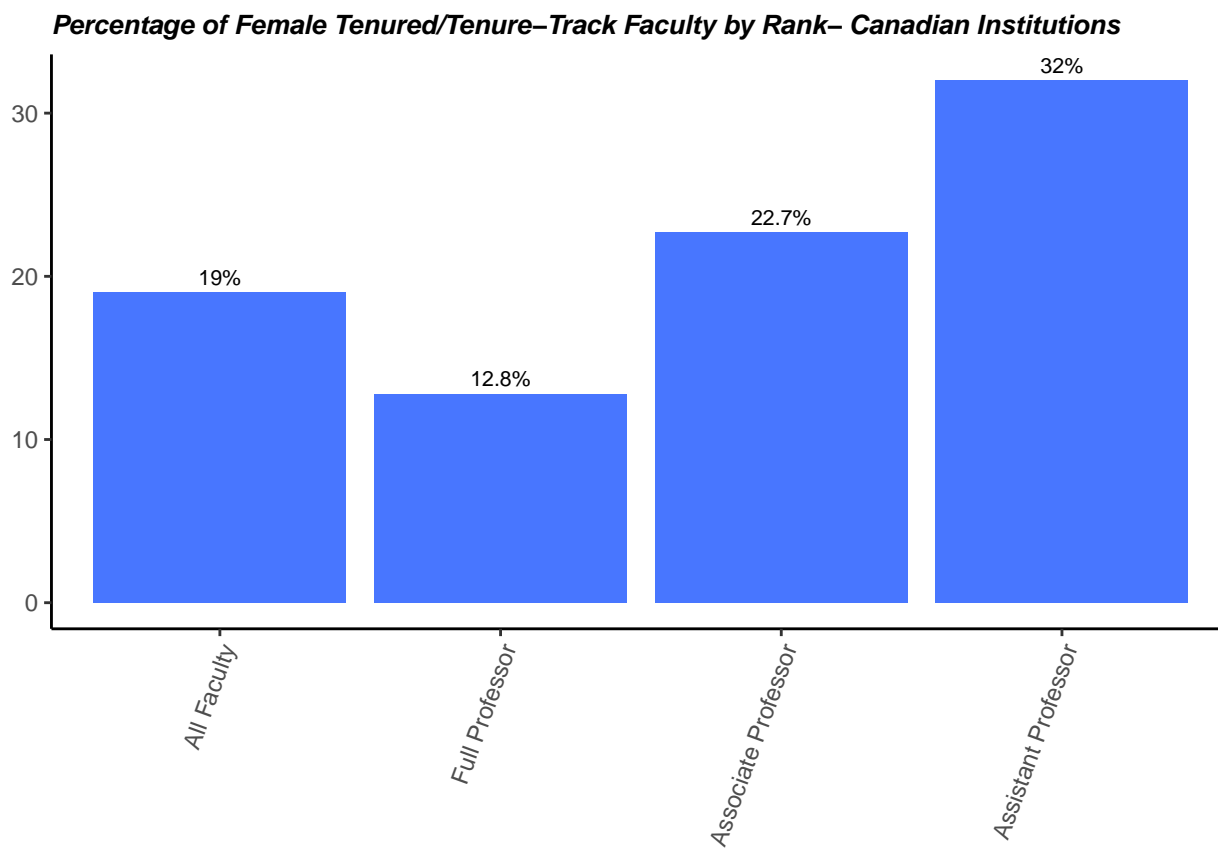
7 ENGINEERING TECHNOLOGY

7.1 ENGINEERING TECHNOLOGY DEGREES

7.1.1 Engineering Technology Degrees Awarded by Discipline

Table 112: Engineering Technology Degrees Awarded by Discipline : 10,176

Discipline Name	Degrees Awarded
Other Eng. Tech. Disciplines	3,139
Mechanical Engr. Tech.	1,526
Engr. Tech. (General)	1,291
Construction Engr. Tech.	1,044
Industrial/Manufacturing Eng. Tech.	936
Computer Engr. Tech.	799
Electrical/Electronics Eng. Tech.	636
Aerospace Engr. Tech.	309
Architectural Engr. Tech.	254
Civil Engr. Tech.	242

Engineering Technology Degrees Awarded by Discipline
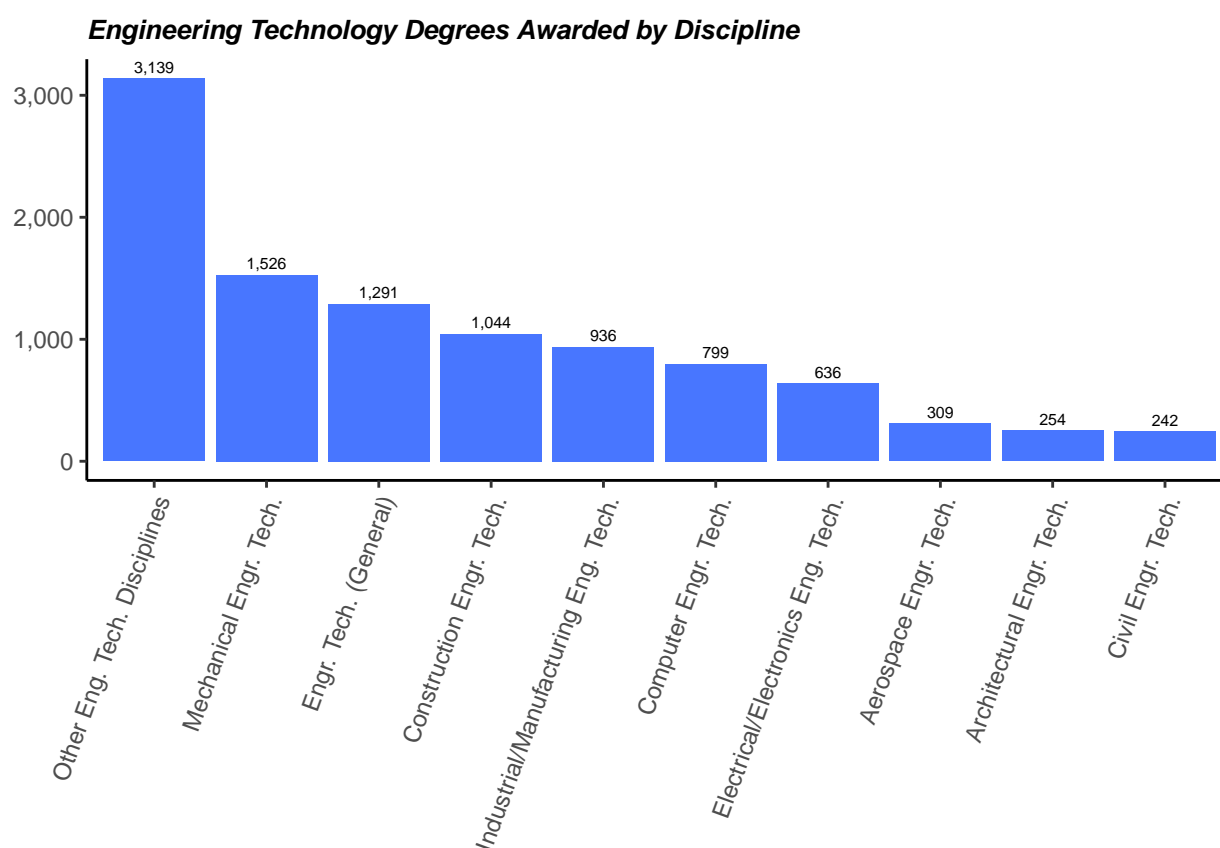
7.1.2 Engineering Technology Degrees Awarded to Underrepresented Minorities by Discipline

Table 113: Engineering Technology Degrees Awarded to Underrepresented Minorities by Engineering Discipline: 2,525

Discipline Name	Degrees Awarded
Other Eng. Tech. Disciplines	804
Engr. Tech. (General)	406
Mechanical Engr. Tech.	302
Construction Engr. Tech.	290
Computer Engr. Tech.	212
Industrial/Manufacturing Eng. Tech.	187
Electrical/Electronics Eng. Tech.	167
Aerospace Engr. Tech.	54
Civil Engr. Tech.	53
Architectural Engr. Tech.	50

* Total does not include computer science (outside engineering).

7.1.3 Percentage of Engineering Technology Degrees Awarded to Underrepresented Minorities by Discipline

Table 114: Percentage of Engineering Technology Degrees Awarded
to Underrepresented Minorities by Discipline 24.7 % of Total

| Discipline Name	Percent Women
Engr. Tech. (General)	31.4%
Construction Engr. Tech.	27.8%
Computer Engr. Tech.	26.5%
Electrical/Electronics Eng. Tech.	26.3%
Other Eng. Tech. Disciplines	25.6%
Civil Engr. Tech.	21.9%
Industrial/Manufacturing Eng. Tech.	20%
Mechanical Engr. Tech.	19.8%
Architectural Engr. Tech.	19.7%
Aerospace Engr. Tech.	17.5%

7.1.4 Engineering Technology Bachelor's Degrees Awarded by Gender

Table 115: Engineering Technology Bachelor's Degrees Awarded by Gender

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Female	9.4%	9.5%	9.4%	10.2%	10.6%	12.8%	13.3%	14.5%	14.2%	13.6%	16.1%	15.5%
Male	90.6%	90.5%	90.6%	89.8%	89.4%	87.2%	86.7%	85.5%	85.8%	86.4%	83.9%	84.5%

Engineering Technology Bachelor's Degrees Awarded by Gender
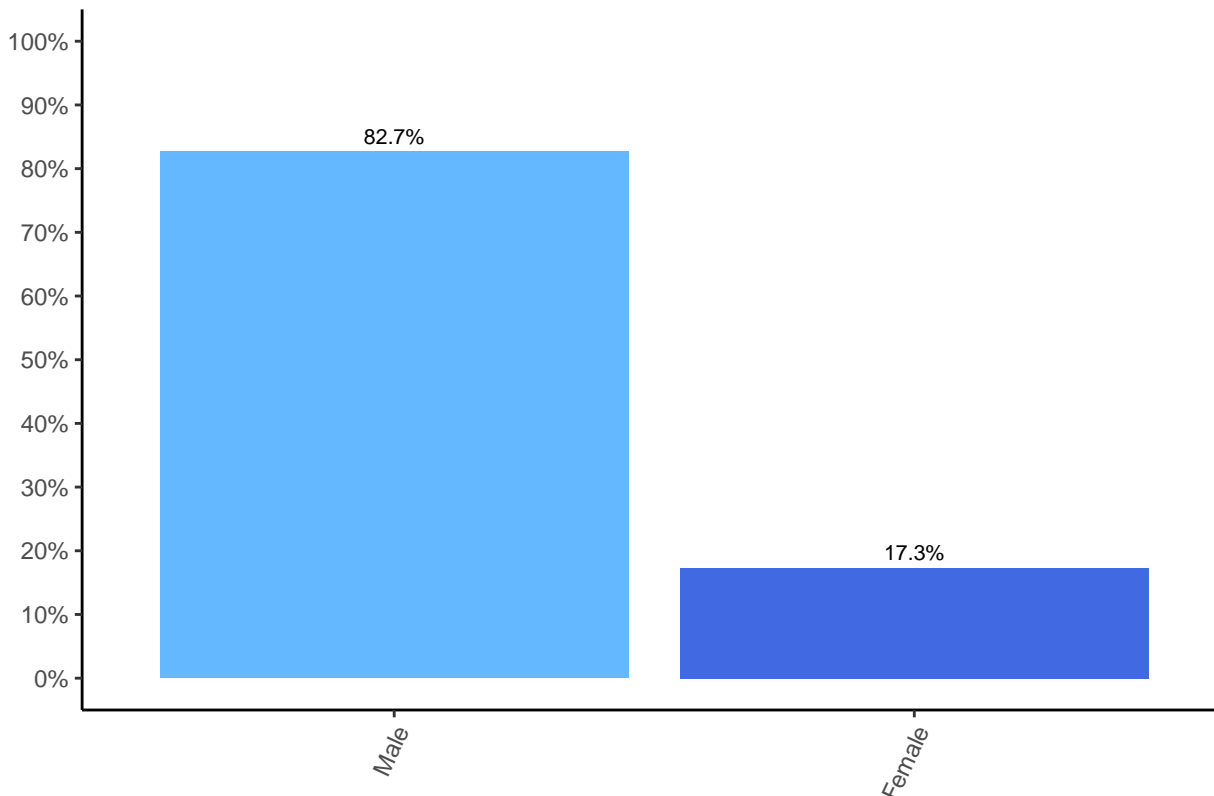
7.1.5 Engineering Technology Bachelor's Degrees Awarded by Race and Ethnicity

Table 116: Engineering Technology Bachelor's Degrees Awarded by Race and Ethnicity*

Ethnicity	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Black or Afr. American	8.5%	9.2%	8.8%	8.8%	8.9%	8.5%	8.6%	6.9%	8.0%	7.5%	8.0%	7.7%
Hispanic	7.1%	7.6%	6.5%	7.8%	7.1%	9.2%	12.9%	10.6%	11.4%	11.6%	14.6%	11.9%
Other	1.0%	1.7%	1.5%	1.9%	1.7%	3.0%	4.1%	3.3%	3.5%	3.6%	4.2%	3.9%
Asian American	5.1%	5.3%	5.0%	4.9%	5.1%	5.8%	6.8%	6.4%	14.7%	5.4%	7.8%	5.2%
White	73.2%	70.4%	73.8%	72.4%	72.7%	68.7%	63.8%	68.4%	61.5%	67.3%	60.4%	67.7%
Unknown	5.1%	5.8%	4.5%	4.3%	4.5%	4.8%	3.8%	4.4%	4.2%	4.6%	5.0%	3.6%

* American Indian/Alaska Native 0.5% Native Hawaiian/Other Pacific Islander 0.1% and Multiracial 3.4% are combined under other
* Data on ethnicity does not include foreign nationals.

Engineering Technology Bachelor's Degrees Awarded by Race and Ethnicity

7.1.6 Engineering Technology Bachelor's Degrees Awarded by Residency

Table 117: Engineering Technology Bachelor's Degrees Awarded by Residency

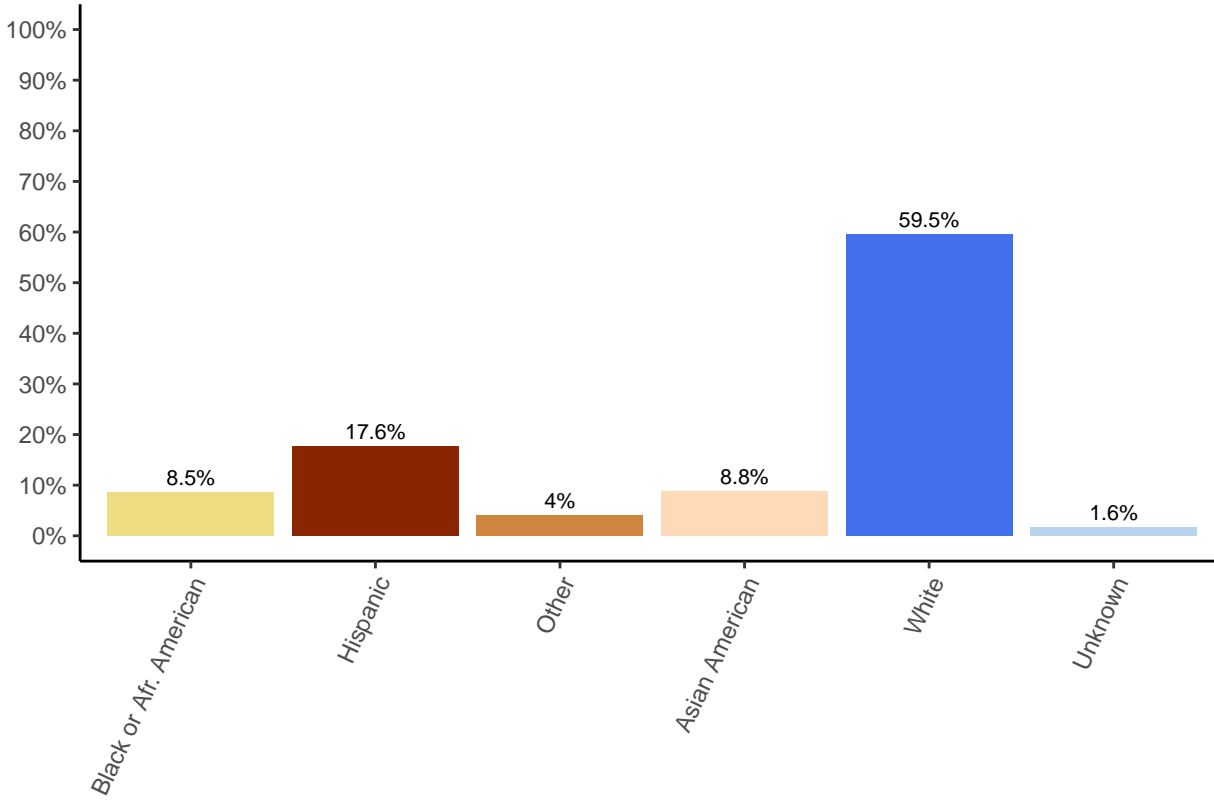| Nationality	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Foreign	5.2%	5.0%	7.4%	10.2%	7.1%	4.9%	6.8%	6.0%	6.8%	8.2%	7.4%	5.9%
Domestic	94.8%	95.0%	92.6%	89.8%	92.9%	95.1%	93.2%	94.0%	93.2%	91.8%	92.6%	94.1%

Engineering Technology Bachelor's Degrees Awarded by Residency
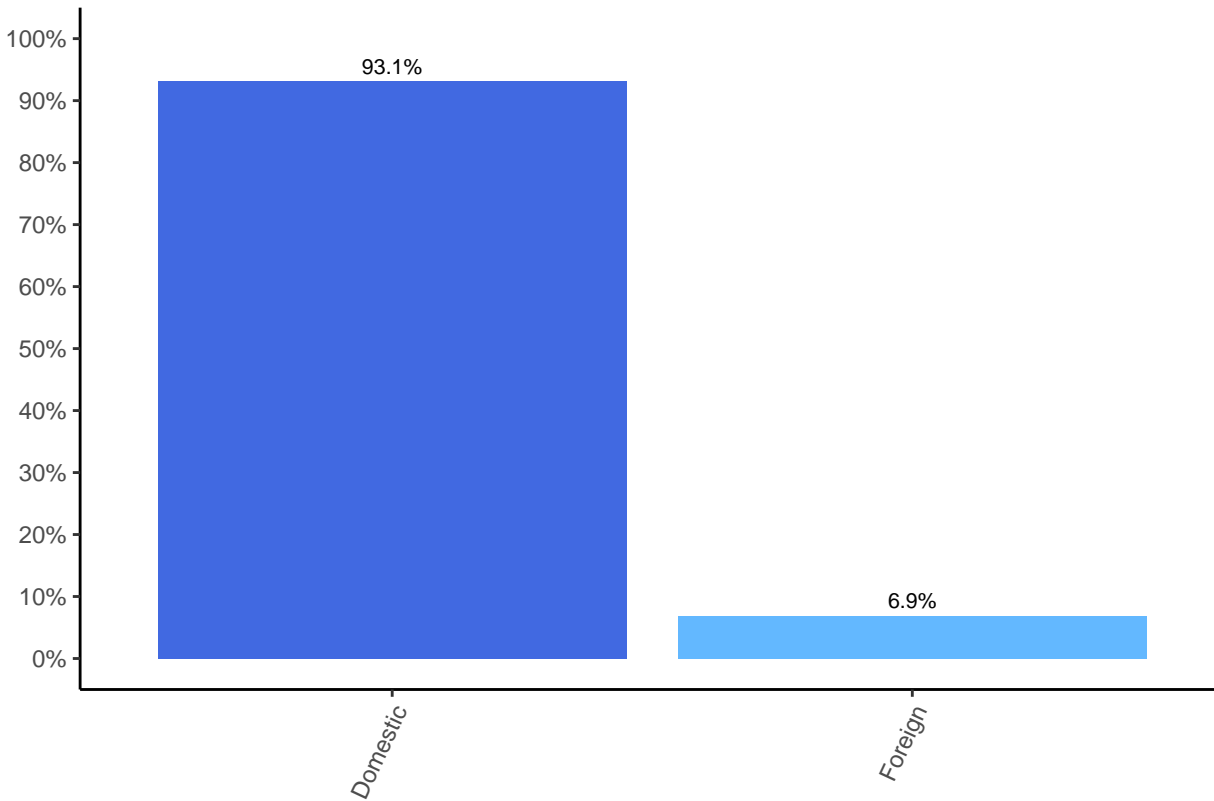
7.1.7 Top 50 Institutions Awarding Highest Number of ET Degrees

Table 118: Top 50 Institutions Awarding Highest Number of ET Degrees

No	Institutions	Degrees Awarded
1	Purdue University Polytechnic Institute	1,083
2	University of Houston	892
3	Arizona State University	857
4	Texas A&M University	689
5	East Carolina University	476
6	Farmingdale State College (SUNY)	412
7	Indiana University-Purdue University Indianapolis	314
8	Rochester Institute of Technology	235
9	New Jersey Institute of Technology	203
10	Ferris State University	202
11	Texas State University	168
12	University of North Carolina at Charlotte	163
13	University of Maine	151
14	University of Southern Mississippi	143
15	Oklahoma State University	139
16	Kennesaw State University	132
17	Eastern Kentucky University	128
18	Western Carolina University	119
19	Tarleton State University	116
20	California State University-Chico	115
20	San Jose State University	115
22	The Pennsylvania State University	111
23	Indiana State University	107
24	New Mexico State University	99
25	University of North Texas	94
26	SUNY Polytechnic Institute	93
27	Eastern Washington University	92
28	California State University-Fresno	85
28	Oregon Institute of Technology	85
30	Montana State University	84
31	Northern Illinois University	82
32	Central Connecticut State University	73
33	Louisiana Tech University	71
33	Wayne State University	71
33	Weber State University	71
36	California State Polytechnic University, Pomona	70
37	Tennessee Technological University	69
38	Georgia Southern University	66
38	University of North Florida	66
40	Purdue University Fort Wayne	65
41	Southeast Missouri State University	64
42	University of Louisiana at Lafayette	59
43	University of Dayton	56
44	Old Dominion University	55
45	East Tennessee State University	54
46	Temple University	52
47	Michigan Technological University	50
47	Minnesota State University-Mankato	50
49	University of Central Missouri	47
50	Murray State University	46

* 117 Institutions included

7.1.8 Top 50 Institutions by Engineering Technology Degrees awarded to Underrepresented Minorities

Table 119: Top 50 Institutions by Engineering Technology Degrees awarded to Underrepresented Minorities

No	Institutions	Degrees Awarded
1	University of Houston	463
2	Arizona State University	243
3	Texas A&M University	203
4	Farmingdale State College (SUNY)	123
5	Purdue University Polytechnic Institute	105
6	East Carolina University	95
7	New Jersey Institute of Technology	83
8	New Mexico State University	74
9	Texas State University	69
10	Kennesaw State University	51
11	Indiana University-Purdue University Indianapolis	50
12	University of North Texas	39
12	University of Southern Mississippi	39
14	California State University-Chico	38

Table 119: Top 50 Institutions by Engineering Technology Degrees
awarded to Underrepresented Minorities *(continued)*

No	Institutions	Degrees Awarded
15	California State Polytechnic University, Pomona	36
15	California State University-Fresno	36
17	Tarleton State University	32
17	University of North Carolina at Charlotte	32
17	Virginia State University	32
20	Rochester Institute of Technology	30
21	San Jose State University	23
22	Northern Illinois University	22
23	Alabama A & M University	20
23	Central Connecticut State University	20
25	Florida International University	19
25	Norfolk State University	19
27	Jackson State University	17
28	Lamar University	16
28	Oklahoma State University	16
28	SUNY Polytechnic Institute	16
28	University of Louisiana at Lafayette	16
32	Indiana State University	14
32	Texas Southern University	14
32	The Pennsylvania State University	14
32	Wayne State University	14
36	Eastern Kentucky University	13
36	Old Dominion University	13
36	South Carolina State University	13
36	University of North Florida	13
40	Prairie View A & M University	12
40	Temple University	12
40	University of Maryland Eastern Shore	12
43	New York Institute of Technology	11
43	The University of Memphis	11
43	Western Carolina University	11
46	Georgia Southern University	10
46	University of Dayton	10
46	Weber State University	10
49	Austin Peay State University	9
49	Eastern Washington University	9

* 117 Institutions included

7.1.9 Top 50 Institutions by Percentage of Engineering Technology Degrees awarded to Underrepresented Minorities

Table 120: Top 50 Institutions by Percentage of Engineering Technology Degrees awarded to Underrepresented Minorities

No	Institutions	Percent Underrepresented Minorities
1	Capitol Technology University	100%
1	Central State University	100%
1	Jackson State University	100%
1	Southern University and A & M College	100%
1	The University of Texas Rio Grande Valley	100%
6	Alabama A & M University	95.2%
7	South Carolina State University	92.9%
8	Prairie View A & M University	92.3%
9	Norfolk State University	90.5%
10	New Mexico State University	74.7%
11	Virginia State University	74.4%
12	Florida International University	61.3%
13	New York Institute of Technology	61.1%
14	Benjamin Franklin Institute of Technology	60%
14	Tennessee State University	60%
16	Texas Southern University	56%
17	University of Nevada, Las Vegas	55.6%
18	University of Houston	51.9%
19	California State Polytechnic University, Pomona	51.4%
20	California State University Maritime Academy	50%
20	Pace University	50%
20	University of Maryland Eastern Shore	50%
23	Western Illinois University	45%
24	Texas A & M University-Commerce	44.4%
24	Texas A & M University-Corpus Christi	44.4%
26	California State University-Fresno	42.4%
27	University of North Texas	41.5%
28	Texas State University	41.1%
29	New Jersey Institute of Technology	40.9%
30	Francis Marion University	40%
30	University of Idaho	40%
32	Lamar University	39%
33	Kennesaw State University	38.6%
34	Fairleigh Dickinson University-Metropolitan Campus	33.3%
34	South Dakota School of Mines and Technology	33.3%

Table 120: Top 50 Institutions by Percentage of Engineering Technology Degrees awarded to Underrepresented Minorities *(continued)*

No	Institutions	Percent Underrepresented Minorities
34	University of Hartford	33.3%
34	Western Washington University	33.3%
38	California State University-Chico	33%
39	Farmingdale State College (SUNY)	29.9%
40	Texas A&M University	29.5%
41	Lake Superior State University	28.6%
41	West Texas A & M University	28.6%
43	Arizona State University	28.4%
44	Tarleton State University	27.6%
45	The University of Memphis	27.5%
46	Central Connecticut State University	27.4%
47	University of Southern Mississippi	27.3%
48	University of Louisiana at Lafayette	27.1%
49	Northern Illinois University	26.8%
50	Drexel University	24%

[*] 117 Institutions included

7.1.10   Top 50 Institutions Awarding Engineering Technology Degrees to Women

Table 121: Top 50 Institutions Awarding Engineering Technology Degrees to Women

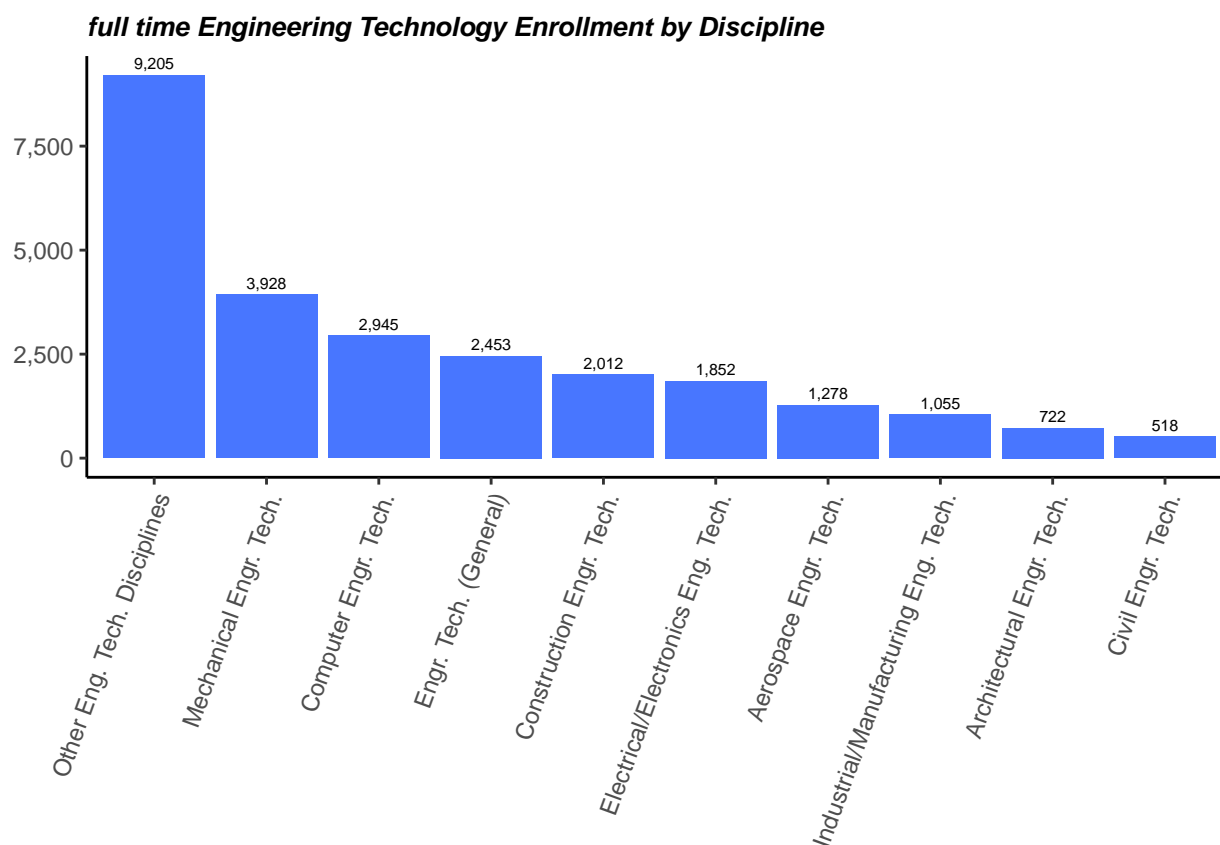| No	Institutions	Degrees Awarded
1	Arizona State University	265
2	Purdue University Polytechnic Institute	252
3	University of Houston	225
4	Texas A&M University	114
5	Indiana University-Purdue University Indianapolis	97
6	East Carolina University	51
7	Farmingdale State College (SUNY)	47
8	Ferris State University	38
9	Rochester Institute of Technology	32
9	University of Southern Mississippi	32
11	New Jersey Institute of Technology	31
12	Texas State University	24
13	Eastern Kentucky University	23
13	Kennesaw State University	23
13	New Mexico State University	23
16	Southern Methodist University	20
17	Oklahoma State University	19
17	San Jose State University	19
19	California State Polytechnic University, Pomona	17
20	University of Maine	15
21	Old Dominion University	13
21	University of North Carolina at Charlotte	13
23	California State University-Chico	11
23	California State University-Fresno	11
23	Southeast Missouri State University	11
23	Temple University	11
27	Murray State University	10
27	The Pennsylvania State University	10
29	East Tennessee State University	9
29	Southern Utah University	9
29	University of Dayton	9
29	University of North Texas	9
29	Virginia State University	9
34	Lamar University	8
34	Tarleton State University	8
34	Wayne State University	8
37	Central Connecticut State University	7
37	Jackson State University	7
37	Louisiana Tech University	7
37	Michigan Technological University	7
37	Middle Tennessee State University	7
37	Norfolk State University	7
37	SUNY Polytechnic Institute	7
37	University of North Florida	7
45	Central Michigan University	6
45	Montana State University	6
45	Oregon Institute of Technology	6
45	Purdue University Fort Wayne	6
45	Saint Cloud State University	6
45	The University of West Florida	6

[*] 117 Institutions included

7.2 ENGINEERING TECHNOLOGY ENROLLMENT, FALL 2021

7.2.1 Full time Engineering Technology Enrollment by Discipline

Table 122: Full time Engineering Technology Enrollment by Discipline: 25,968

Discipline Name	Degrees Awarded
Other Eng. Tech. Disciplines	9,205
Mechanical Engr. Tech.	3,928
Computer Engr. Tech.	2,945
Engr. Tech. (General)	2,453
Construction Engr. Tech.	2,012
Electrical/Electronics Eng. Tech.	1,852
Aerospace Engr. Tech.	1,278
Industrial/Manufacturing Eng. Tech.	1,055
Architectural Engr. Tech.	722
Civil Engr. Tech.	518

* Enrollment is for full time Bachelor's degree candidates in Engineering Technology

full time Engineering Technology Enrollment by Discipline

7.2.2 Top 50 Institutions by Engineering Technology Enrollment

Table 123: Top 50 Institutions by Engineering Technology Enrollment

No	Institutions	Enrollments
1	Purdue University Polytechnic Institute	4,484
2	Arizona State University	4,268
3	University of Houston	4,246
4	Texas A&M University	2,308
5	Farmingdale State College (SUNY)	1,541
6	East Carolina University	1,322
7	Rochester Institute of Technology	1,116
8	Eastern Michigan University	928
9	Indiana University-Purdue University Indianapolis	901
10	Kennesaw State University	753
11	The University of Toledo	705
12	University of Cincinnati	679
13	Purdue University Northwest, Engineering	661
14	University of North Carolina at Charlotte	656
15	New Jersey Institute of Technology	649
16	San Jose State University	610
17	University of Maine	520
18	Oklahoma State University	518
19	Oregon Institute of Technology	449
20	California State Polytechnic University, Pomona	424
21	New Mexico State University	395
22	Montana State University	386
23	Wayne State University	354
24	SUNY Polytechnic Institute	336

| No	Institutions	Enrollments
25	Brigham Young University - Idaho	335
26	The Pennsylvania State University	318
27	University of North Texas	308
28	South Dakota State University	266
29	Old Dominion University	260
30	Louisiana Tech University	259
31	Penn State Erie, The Behrend College	229
32	University of Dayton	224
33	Virginia State University	220
34	University of Louisiana at Lafayette	207
35	Tennessee Technological University	192
36	The University of Memphis	179
37	Temple University	175
38	Western Michigan University	163
39	Cleveland State University	156
40	California State University Maritime Academy	155
41	Drexel University	149
42	Wright State University	146
43	Bradley University	143
44	Central Michigan University	109
45	University of Massachusetts Lowell	96
46	University of Arkansas at Little Rock	87
47	The Ohio State University	74
48	Southern Illinois University Carbondale	72
49	University of Idaho	11
50	University of Nevada, Las Vegas	10

* 117 Institutions reported.

* Enrollment is for full time and part-time Bachelor's degree candidates in engineering technology.

7.2.3 Engineering Technology Enrollment by Gender

Table 124: Engineering Technology Enrollment by Gender

Gender	Percentage
Female	17.4%
Male	82.6%

Engineering Technology Bachelor's Enrollment by Gender
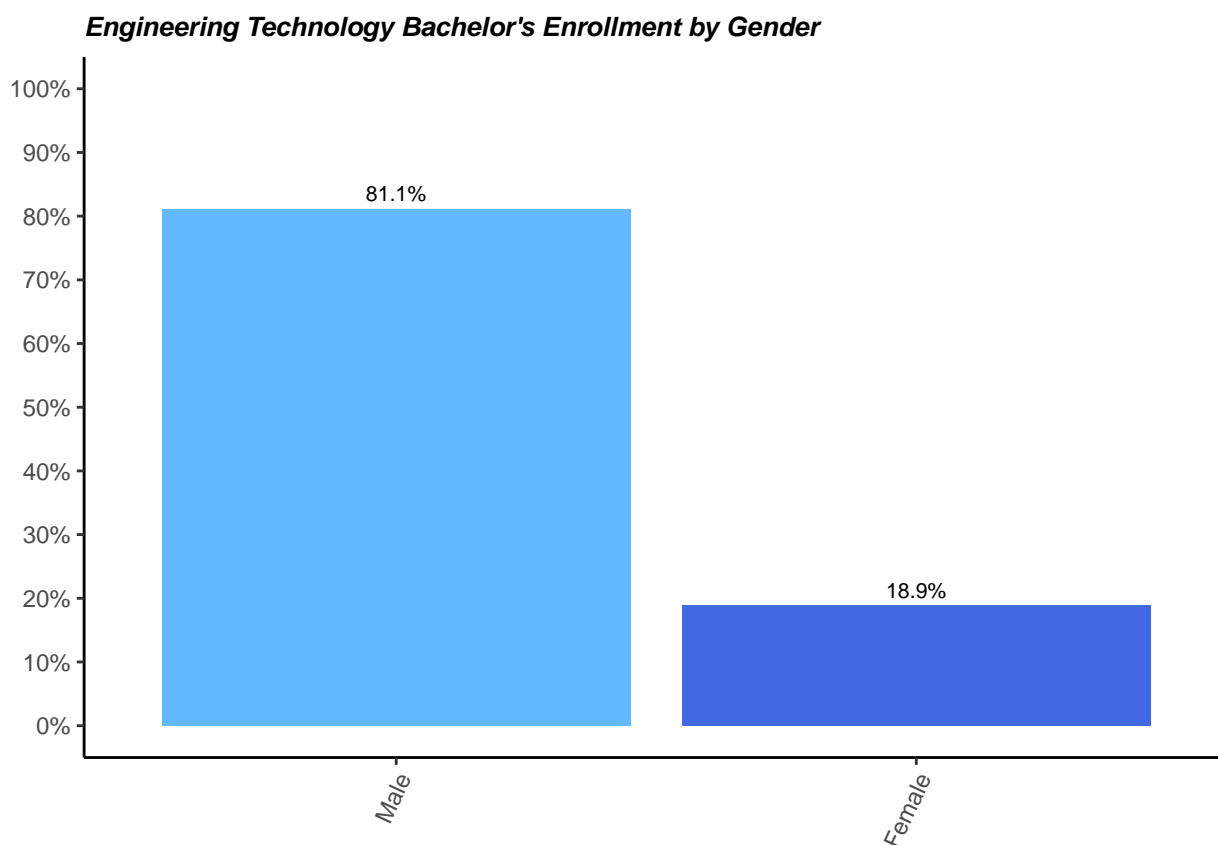
7.2.4 Engineering Technology Enrollment by Race and Ethnicity

Table 125: Engineering Technology Enrollment by Race and Ethnicity*

Ethnicity	Percentage
Black or Afr. American	9.1%
Hispanic	14.6%
Other	4.5%
Asian American	7.5%
White	62.3%
Unknown	2%

* American Indian/Alaska Native 0.5% Native Hawaiian/Other Pacific Islander 0.2%

* and Multiracial 3.9% are combined under other

* Data on ethnicity does not include foreign nationals.

Engineering Technology Enrollment by Race and Ethnicity
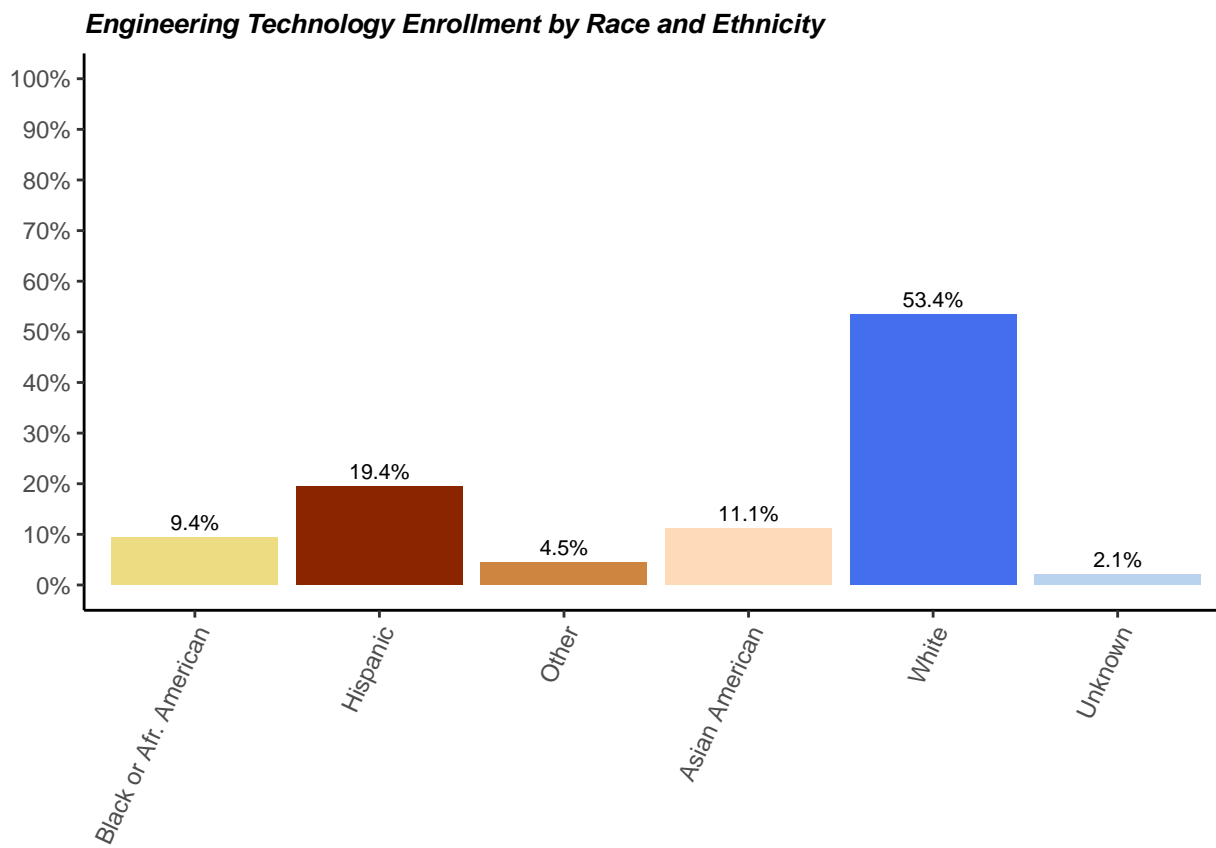
7.2.5 Engineering Technology Enrollment by Residency

Table 126: Engineering Technology Enrollment Awarded by Residency

Nationality	Percentage
Foreign	3.8%
Domestic	96.2%

* Enrollment is for full time and part-time Bachelor's degree candidates in engineering technology
* 50 Institutions reported.

Engineering Technology Enrollment Awarded by Residency