FINDING YOUR WORKFORCE:

LATINO TALENT IN STEM



Linking Latino college completion with U.S. workforce needs.



FINDING YOUR WORKFORCE

LATINO TALENT IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

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and ready to meet our mission. Launched in 2004 in the nation's capital, *Excelencia* is building a network of results-oriented educators and policymakers to address the U.S. economy's need for a highly educated workforce and engaged civic leadership. For more information, visit: www.EdExcelencia.org.

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EXECUTIVE SUMMARY

Latino talent is needed in all levels of our workforce, including areas of greatest need—STEM. While Latinos have increased their representation in college enrollment and credentials earned, Latino talent remains overrepresented in high-skilled, low-wage occupations. Ensuring America's future to meet our nation's economic and civic engagement requires students, institutions, and employers to play an active role in preparing, selecting, and sourcing Latino talent with a tactical plan to link these graduates to the workforce. The following facts about Latinos in the STEM workforce and in education can inform a tactical plan.

WORKFORCE

- **STEM occupations are projected to increase** at double the rate of non-STEM occupations in the next decade.
- Latinos have **increased their representation in STEM occupations** in the last decade at a faster rate than any other racial/ethnic group.
- Latinos are **underrepresented across all STEM industries** relative to other racial/ethnic groups.
- Latinos in STEM earn lower median salaries in science and engineering occupations.

EDUCATION

- About one in ten of Latino adults have earned a credential in a STEM field.
- Latinos earning credentials in STEM are more likely to be concentrated at the baccalaureate level.
- The majority of the colleges and universities where Latinos earn the most credentials in STEM at the undergraduate level are Hispanic-Serving Institutions (HSIs).¹

For institutions looking to develop Latino talent for a global economy, this brief provides examples of what institutions are doing and actionable steps to build stronger relations with employers for STEM occupations. For employers, this brief identifies institutions graduating the most Latinos with STEM credentials and evidence-based practices to inform recruitment and investment strategies.

WHAT EMPLOYERS CAN DO:

- Reconfigure recruitment to focus on the top 25 institutions graduating Latinos in STEM fields at different academic levels and support their career pathways into more high-skilled occupations
- Partner with colleges and universities that have earned the Seal of *Excelencia*—these colleges disproportionately and intentionally enroll and graduate Latino students across the nation—to advance STEM workforce preparation and re-training programs, recruitment, and business innovation
- Integrate data sources with institutions to track success of new STEM hires and inform institutional efforts serving Latino, and all, students
- Invest and promote evidence-based practices at colleges and universities that strengthen career pathways and the Latino talent pipeline to the STEM workforce

WHAT INSTITUTIONS CAN DO:

- Intentionally develop career pathways through stackable credentials to meet the immediate needs of Latino students along with workforce advancement and re-training opportunities in STEM
- Replicate and/or scale evidence-based programs providing post-completion supports to transition to the STEM workforce for Latino graduates
- Prioritize employment opportunities in high-wage STEM occupations for Latino students
- Partner with HSI collaboratives to prepare Latino talent and connect with employers in STEM fields

¹ HSIs are defined as accredited, degree-granting public or private nonprofit institutions of higher education with 25% or more total undergraduate Hispanic full-time equivalent (FTE) student enrollment, as noted in Title V of the Higher Education Opportunity Act, as amended in 2008. To be eligible for the "Developing HSIs Program," the law further requires that an HSI have a high enrollment of needy students and low core expenditures.

INTRODUCTION

This increase in attainment comes at a time when private industry and the federal government are investing significantly in Science, Technology, Engineering, and Mathematics (STEM). By 2031, STEM occupations are projected to increase by 11 percent compared to five percent of non-STEM occupations and five percent of all occupations in the U.S. (U.S. Bureau of Labor Statistics, 2022b).

Latinos are the nation's fastest growing population. Between 2010 and 2020, Latinos accounted for over 50 percent of the nation's population growth—the largest share among all groups (Jones et al., 2021b). Today, Latinos make up 20 percent of the United States population (62.1 million; *Excelencia* in Education, 2023b) and are projected to account for 91 percent of new workers by 2031 (U.S. Bureau of Labor Statistics, 2022a). As the Latino population grows, so does the need to increase their representation in the STEM workforce.

Latinos are earning credentials to meet STEM needs. In five years (between 2015 and 2019), Latinos' degree completion in STEM increased by 37 percent (*Excelencia* in Education, 2022c). Further, from 2011 to 2021, Latinos increased their representation in select STEM occupations up to 132 percent. Although more Latinos are entering the STEM workforce, they continue to be underrepresented in high-salary STEM occupations. For example, despite growth over the last ten years, Latinos represent 18 percent of the nation's workforce yet represent less than 10 percent of all STEM occupations.

To ensure America's future, institutions and STEM employers must both play an active role in preparing, selecting, and sourcing Latino talent for a global economy. *Excelencia's* research demonstrates that select institutions are investing in the recruitment, development, and completion of Latino talent and STEM employers have opportunities to strengthen their workforce. To bridge this gap, *Excelencia* has analyzed national datasets to connect STEM employers with institutions that are graduating and preparing Latinos for the workforce.

There is an opportunity for both STEM employers and institutions to take action. This brief, Finding Your Workforce: STEM (FYW: STEM), identifies the top institutions graduating Latinos (2019-20) in STEM from certificates to the doctorate

level. These top 25 institutions are meeting the nation's economic needs by intentionally serving Latino students and producing Latino talent. This brief also highlights institutions and their intentional efforts to support post-completion success by providing educational credentials needed to support our current and future STEM workforce.



BACKGROUND

Our knowledge-based economy continues to project an increase in careers that require postsecondary training and education. As *Excelencia* continues to learn more from institutions and their efforts to increase Latinos' enrollment (*Excelencia* in Education, 2022a), completion (*Excelencia* in Education, 2022b), and post-completion success (Bermea, 2022), workforce is a natural extension of our mission as we highlight the current condition of Latinos in the STEM workforce. Since 2004, *Excelencia* has learned that select institutions are intentionally recruiting, graduating, and preparing Latino talent for the workforce. STEM employers have an opportunity to bridge their efforts by taking active steps to engage Latino students in experiences that promote STEM workforce preparation and foster post-completion success.

To seize the opportunity to increase the number of trained and educated Latinos in the STEM workforce, employers and institutions can leverage data to identify where Latino talent is located. For example, consider the following facts:

ENROLLMENT:

In 2021, Latinos' undergraduate enrollment was 3.0 million and represented 21 percent of all undergraduate students (*Excelencia* in Education, 2023b). Further, Latinos' enrollment in college is projected to increase over the next decade as they represent a higher proportion of the college-age population (*Excelencia* in Education, 2022a). Combining this demographic growth with the knowledge that Latinos are likely to continue to prioritize access, location, and cost in their choice of institution (Santiago, 2007) has fueled the growth of Hispanic-Serving Institutions (HSIs). Latino undergraduates are highly concentrated at HSIs—62 percent of all Latino undergraduates are enrolled at HSIs (*Excelencia* in Education, 2023a), and the numbers of HSIs are also projected to grow with Latinos' college enrollment.

COMPLETION:

As a result of completion efforts, 30 percent of Latinos in the workforce (25 years and older) have an associate's degree or higher (*Excelencia* in Education, 2022b). In 2020, Latinos earned over 98,000 degrees in STEM and represented 13 percent of all STEM degree recipients (*Excelencia* in Education,

2022c). Today, a high concentration of Latinos who earned an educational credential in STEM did so at an HSI. In 2019-20, HSIs awarded 53 percent of STEM degrees to Latinos (*Excelencia* in Education, 2022b). Moreover, significantly increasing the number of Latino students attaining college degrees requires that institutions go beyond enrollment to intentionally serve Latino students (*Excelencia* in Education, 2023c). Seal of *Excelencia* certified² institutions, most of which are HSIs, are setting the pace for institutional transformation and are among the top institutions graduating Latino students.

POST-COMPLETION:

According to a recent survey, over 70 percent of Latinos in their senior year of college earning degrees in STEM, engage in one or more experiential learning activities (e.g., internships, study abroad, or research with faculty) before graduation (National Survey for Student Engagement, n.d.). These high-impact practices³ support Latino graduates in being workforce ready (Martinez & Santiago, 2020).

² To support and reinforce institutional capacity to intentionally serve, Excelencia developed the Seal of Excelencia framework that integrates essential components of transformation into a comprehensive institutional strategy for SERVING students.

³ Due to their positive impact on student learning and retention, the National Survey for Student Engagement considers senior capstone, service-learning, internships, study abroad, research with faculty, or learning community as High Impact Practices.

WORKFORCE:

In Excelencia's national study on life outcomes among graduates of HSIs, Latino graduates are as likely as their non-Latino peers to have applied for a job or internship (60 percent vs. 58 percent, respectively), and to have been extremely active in extracurricular activities and organizations (17 percent vs. 16 percent; Excelencia in Education & Gallup, 2018). As a result of engaging in these activities, 31 percent of Excelencia network4 graduates strongly agree that their alma mater provided them with the knowledge and skills they needed to be successful in the workplace (Excelencia in Education & Gallup, 2018). When hired, Latino graduates from Excelencia's network institutions shared they are fulfilled in their work and actively engaged in their workplace (Excelencia in Education & Gallup, 2018). Institutions who expand access to hands-on learning in and outside the classroom are actively

investing in Latino talent (Bermea, 2022; Martinez & Santiago, 2020). These efforts are indicators to pinpoint institutions that are tapping Latino talent and preparing them to enter the workforce.

Excelencia identified the top 25 institutions where Latinos earned a credential across five award levels (i.e. certificate, associates, baccalaureate, master's, doctorate) in STEM. The top 25 institutions serve as prime locations for sourcing and selecting Latino talent. Highlighting these top 25 institutions, especially HSIs, creates an opportunity for institutions and STEM employers to make intentional connections and strengthen efforts to develop and source Latino talent. Together, they can build strategic partnerships to facilitate the development of Latino talent into the current and future STEM workforce.



4 Presidents for Latino Student Success (P4LSS) is a network of a diverse group of college and university presidents and chancellors who have committed to making their institutions learning environments where Latino students thrive. They are part of the Excelencia in Action network and collaborate with Excelencia in Education to leverage collective expertise and resources, foster partnerships, and amplify current efforts at the national level.

LATINOS IN THE STEM WORKFORCE: 2021

Latinos in the workforce are projected to reach about 36 million, account for over 90 percent of new workers, and make up one in five workers of the nation's workforce by 2031. During this same time, STEM occupations are projected to double (11 percent) compared to non-STEM occupations (five percent). Within this job growth, computer and mathematical occupations will increase by 15 percent compared to 7 percent of life, physical, and social science occupations and 4 percent of architecture and engineering occupations. Within computer and mathematical occupations, data scientists, information security analysts, and statisticians are projected to grow the most (by 36 percent, 35 percent, and 33 percent, respectively).

Latinos' representation within the workforce is on the rise overall and across various STEM industries and careers. However, despite this growth, Latinos continue to be underrepresented in STEM occupations, especially high-skilled and high-paying occupations. Consider the following⁵:

REPRESENTATION

Latino representation in STEM professional occupations is on the rise, but is lower in STEM management occupations.⁶

- The number of Latinos employed in STEM professional occupations increased over the last decade. From 2011 to 2021, Latino representation in computer and mathematics occupations increased by 132%, architecture and engineering occupations increased by 80%, and life, physical, and social sciences occupations increased by 77%.
- In STEM management occupations, Latinos are disproportionately underrepresented relative to their White peers. In 2021, Latinos represented 7% of computer and information system managers and 7% of architectural and engineering managers, compared to their White peers (72% and 80%, respectively).

OCCUPATION

Latinos are underrepresented across STEM industries compared to other groups.

■ Latinos are significantly underrepresented in computer and mathematical professional

- **occupations.** In 2021, Latinos represented 8% of those in computer and mathematical occupations, compared to their White (65%), Asian (23%), and African American (9%) peers.
- Latinos are significantly underrepresented in architecture and engineering professional positions. In 2021, Latinos represented 10% of those in architecture and engineering occupations, compared to their White (77%), Asian (15%), and African American (6%) peers.
- Latinos are significantly underrepresented in life, physical, and social science professional positions.

 In 2021, Latinos represented 8% of those in life, physical, and social science occupations, compared to their White (75%), Asian (15%), and African American (7%) peers.

EDUCATION

Latinos earn a small percentage of STEM credentials, yet at a faster rate compared to other groups.

- The number of STEM credentals Latinos earned increased at a faster rate compared to other groups. From 2015 to 2020, the number of STEM credentials Latinos earned increased by 44%, compared to Asians (42%), African Americans (11%), and Whites (10%).
- Latinos earn STEM educational credentials at a lower rate than their White peers. In 2019-20, 13% of Latinos earned a STEM credential, compared to 48% of their White peers.

⁵ Excelencia in Education analysis of the U.S. Bureau of Labor Statistics' Current Population Survey 2021 Tables 5, 6, 7, 8, 10, and 37.

⁶ According to the U.S. Bureau of Labor Statistics, 'STEM professional occupations' include such occupations like: Computer and information research scientists, software developers, engineers, physicists, chemists, etc.

DEGREE CONCENTRATION:

The number of Latinos earning a STEM credential has increased across all award levels.

- The number of STEM credentials earned by Latinos increased across all award levels. Between 2015 and 2020, Latinos' degree attainment in STEM increased the most at the master's level (65%), followed by baccalaureate (63%), associates (43%), doctorates (20%), and certificates (8%).
- Latinos are more likely to earn a STEM degree at the baccalaureate level. In 2019-20, of all credentials Latinos earned in STEM, 60% were at the baccalaureate degree level, followed by associates (18%) certificates (13%), master's (8%), and doctorates (1%).

SALARIES⁷

Latinos in STEM earn lower median salaries in science and engineering occupations when compared to other groups.

- Latinos have a lower median annual salary in science occupations compared to other ethnic groups. In 2019, the median salary for Latinos in science occupations was \$72,000, compared to \$105,000 for Asians, \$91,000 for Whites, and \$82,000 for African Americans.
- Latinos have a lower median annual salary in engineering occupations compared to other ethnic groups. In 2019, the median salary for Latinos in engineering occupations was \$94,000, compared to \$100,000 for Asians, \$100,000 for Whites, and \$89,000 for African Americans.



⁷ Excelencia in Education analysis of the National Center for Science and Engineering Statistics' Women, Minorities, and Persons with Disabilities in Science and Engineering Table 9.17 Median annual salary of scientists and engineers employed full time, by sex, broad occupation, age, ethnicity, and race: 2019

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH CREDENTIALS EARNED BY LATINOS IN 2019-20

The top institutions awarding educational credentials to Latinos in 2019-20 include 91 unique institutions across 19 states and Puerto Rico. The majority (64 percent) of the top 25 institutions conferring awards to Latinos at the certificate, associates, baccalaureate, master's and doctorate levels were HSIs located across six states and Puerto Rico. Of the top institutions awarding education credentials to Latinos, the majority are public, four- and two-year institutions (56 percent and 23 percent, respectively).

Reflecting this accelerated growth, Latinos' representation within the STEM workforce is on the rise across various STEM industries and careers. However, despite this growth, Latinos continue to be underrepresented in STEM occupations. Consider the following:

STEM CREDENTIALS EARNED BY LATINOS AT TOP 25 AND ALL INSTITUTIONS

Latinos earning STEM credentials are concentrated in a small number of institutions.

In 2019-20:

■ About 30% of all Latinos who earned STEM degrees graduated from one of the top 25 institutions awarding STEM degrees to Latinos (see Table 1).

- Of Latino STEM graduates, the highest concentration of those earning credentials in the top 25 institutions were at the doctorate level (41%) and certificate level (36%).
- About one in four of all Latinos who earned STEM associate (29%), baccalaureate (29%), or master's (29%) degrees graduated from a top 25 institution awarding STEM degrees to Latinos.

TABLE 1: TOTAL STEM CREDENTIALS EARNED BY LATINOS AT TOP 25 INSTITUTIONS AND ALL INSTITUTIONS, BY DEGREE LEVEL, IN 2019-20

	Total STEM Credentials Earned by Latinos									
Credential Level	Top 25 Institutions	All Institutions	% at Top 25 Institutions							
Certificate	5,807	16,329	36%							
Associate	5,079	17,375	29%							
Baccalaureate	16,309	55,464	29%							
Master's	2,326	7,936	29%							
Doctorate	477	1,177	41%							
Total	29,998	98,281	31%							

Source: Excelencia in Education analysis of U.S. Department of Education, National Center for Education Statistics, IPEDS, 2020 Institutional Characteristics and Completions Survey

WHAT WORKS FOR LATINO STUDENTS IN STEM

Excelencia in Education identified evidence-based practices among the top 25 institutions graduating Latino students that demonstrated a commitment to furthering the pipeline from degree completion to careers in STEM. The institutional programs highlighted below demonstrate the importance of providing financial support and professional development opportunities in STEM as well as training future STEM educators. These institutional practices are considered to be particularly valuable because they contribute to careers in STEM in the following ways:

EVIDENCE-BASED PRACTICE	WHY IT WORKS
(1) Provide financial support and professional development opportunities in STEM	Career panels, conferences, research competitions, and site visits are types of professional development opportunities that allow students to network with working professionals and apply what they learn in the classroom in practice, with financial support to be able to participate.
(2) Training STEM educators	Educating and training tomorrow's STEM educators is critical for preparing students in STEM courses with the necessary skills and knowledge to thrive in a world driven by technology and innovation.

PROVIDING FINANCIAL SUPPORT AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES IN STEM

Providing students with career and professional development opportunities such as mentorship opportunities with STEM faculty or connections with career professionals allow students to identify and explore careers in STEM. In tandem, financial support or incentives through these programs are critical for Latino and other low-income students to be able to participate and engage in these activities. Consider the following examples of programs at top 25 institutions graduating Latinos:

DESTINO Program at Long Beach City College

At Long Beach City College, the Developing Engaging Science Through Innovative New Opportunities (DESTINO) program was created in response to the growing need and demand for U.S. workers to enter into STEM fields. Destino in Spanish means "destiny" or "destination." The DESTINO program provides all STEM students at Long Beach City College with support services and academic support in the following areas:

- A dedicated STEM Counselor
- STEM-focused Career Panels
- University Field Trips and a Northern California University Tour
- Financial Literacy and Scholarship Workshops
- Tutoring in STEM Courses
- Use of the DESTINO Science Resource Center
- Academic Success Workshops
- Participation in the Viking Summer Voyage-STEM option
- Mentoring through STEM faculty and Success Coaches

Once students are enrolled in the program all activities and services are free to program participants. These services are designed to support STEM students through completion at Long Beach City College with the goal of transferring to a four-year university to pursue a bachelor's degree or higher in STEM.

S-STEM Scholarship Program at the University of Texas at El Paso

The S-STEM Scholarship Program at the University of Texas at El Paso provides financial assistance and professional development opportunities to students in Computer Science majors. Students that receive the scholarship are funded for up to four years and engage in a variety of co-curricular activities that aim to enhance their professional skills. Students are involved in activities that include workshops, conferences, and research opportunities. Students also receive travel stipends to attend professional workshops, conferences, or competitions off-campus. To help facilitate their pathway to degree completion, students are also matched with an S-STEM advisor who helps them with course enrollment and career development opportunities. The S-STEM scholarship program is designed to ensure students graduate with a bachelor's degree in computer science and are prepared to enter the workforce.

TRAINING TOMORROW'S STEM EDUCATORS

As the United States heavily invests in STEM occupations, institutions are leading the way in developing the nation's future STEM workforce. STEM educators are critical for equipping students with the skills and knowledge to participate in the innovation economy and contribute to technological advancement. The demand for developing future STEM teachers that inspire more students to pursue degrees in STEM, especially those from underrepresented groups, are critical to diversify the future workforce and to be more representative of the U.S. population. Consider the following example of a program at a top 25 institution graduating Latinos:

STEM Transformation Institute at Florida International University

The STEM Transformation Institute at Florida International University is a multidisciplinary program that supports more than 12,500 undergraduate students across STEM fields. The Institute leverages research-based education practices designed to prepare students for a teacher career in STEM fields. Key programs housed in the institute include the following: (1) Catalyzing Change in Calculus (C3), (2) Discovery Research K-12, (3) Extending the Coherent Gateway to STEM Teaching and Learning, (4) Authentic Bioinformatics in the classroom (ABC), (5) Collaborative Research: Design and Development of a K-12 STEM Observation Protocol, and (6) Science in the Classroom. Collectively, these programs offered in the STEM Transformation Institute provide students with hands-on

experience in developing STEM curriculum, practicing culturally competent teaching pedagogies, and implementing practices that recruit and retain students that are underrepresented in STEM fields. These programs are attentive to the developing needs of STEM educators and the broader demands of the STEM workforce to adequately prepare future educators to accelerate student engagement and achievement in STEM fields.



FINDING YOUR WORKFORCE TOP 25 INSTITUTIONS GRADUATING LATINOS IN STEM

The lists of top 25 institutions graduating Latinos in STEM serve as a resource and starting place for employers and institutions interested in recruiting Latinos with postsecondary credentials and learning more about what they are doing to prepare and support their graduates for the workforce. Several of the top 25 institutions have aligned pathways for educational progress in STEM fields for Latinos and are thus represented at multiple academic levels.

INSTITUTION	AMONG TOP 25 INSTITUTIONS, BY ACADEMIC LEVEL
Texas A&M University-College Station (TX)	baccalaureate, master's, doctorate
The University of Texas at El Paso (TX)	baccalaureate, master's, doctorate
University of Arizona (AZ)	baccalaureate, master's, doctorate
University of California-San Diego (CA)	baccalaureate, master's, doctorate
University of Florida (FL)	baccalaureate, master's, doctorate
University of South Florida (FL)	baccalaureate, master's, doctorate

The following tables list the top 25 institutions awarding certificates or degrees to Latinos in STEM for 2019-20 at the certificate, associates, baccalaureate, master's, and doctorate levels. First professional degrees are not included in this list. Each list includes information on location, sector, identification of HSIs, and a summary of each list. Notably, the list also identifies institutions who are Seal of *Excelencia* Certified, a national certification for institutions that strive to go beyond enrollment to intentionally SERVE Latino students.

ADDITIONAL INFORMATION ON LISTS OF TOP 25 INSTITUTIONS

It should be noted that the lists of top 25 institutions conferring degrees to Latinos by academic level is based solely on the numbers of certificates or degrees awarded between 2019-20. Thus, the lists of institutions are different for each academic level. The lists included in the brief do not provide any information on the quality or productivity of the institutions and their programs of study. This would require additional and more detailed analysis than is provided in this

brief. Further, the lists count awards, not an unduplicated headcount of recipients. The lists were created using data on certificates and degrees conferred from the U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), 2020 Institutional Characteristics and Completions Survey. These data are reported by every institution of higher education participating in Title IV (federal student financial aid programs). Institutions awarding certificates of less than one-year and those of one-year but less than two years are included in the certificate level to reflect the diverse postsecondary options available to those preparing for the current workforce needs of the country. The identification of institutions as HSIs is based on analysis by Excelencia in Education using the U.S. Department of Education, NCES, IPEDS, 2021 Fall Enrollment and Institutional Characteristics Surveys. A complete list of the institutions that meet the basic federal definition of an HSI is available at https://www. edexcelencia.org/research-policy/hispanic-serving-institutionshsis.

TOP INSTITUTIONS AWARDING STEM CERTIFICATES TO LATINOS ACADEMIC YEAR: 2019-20

	Institutions	State	HSI	Seal	Sector	Total Degrees Awarded	Total Degrees: Hispanics	% Total Degrees: Awarded
1	Dallas College	TX	*		4 Public	1,267	625	49%
2	South Florida Institute of Technology	FL			>2 Private (FP) ⁸	550	550	100%
3	South Texas College	TX	*	**	4 Public	410	394	96%
4	NUC University	PR			4 Private (FP)	374	373	100%
5	San Jacinto Community College	TX	*		4 Public	622	331	53%
6	Valencia College	FL	*		4 Public	972	328	34%
7	Seminole State College of Florida	FL	*		4 Public	1,097	303	28%
8	MyComputerCareer at Raleigh	NC			>2 Private (FP)	1,813	286	16%
9	Chaffey College	CA	*		2 Public	373	246	66%
10	Laredo College	TX	*		4 Public	230	225	98%
11	MyComputerCareer at Columbus	ОН			2 Private (FP)	1,820	179	10%
12	Mt San Antonio College	CA	*		2 Public	345	175	51%
13	Broward College	FL	*		4 Public	484	174	36%
	San Antonio College	TX	*	**	2 Public	331	174	53%
15	Reedley College	CA	*		2 Public	187	165	88%
16	Lee College	TX	*		2 Public	388	164	42%
17	Miami Dade College	FL	*	**	4 Public	236	150	64%
18	St Philip's College	TX	*		2 Public	217	149	69%
19	Lone Star College System	TX	*		4 Public	377	140	37%
20	College of Southern Nevada	NV	*		4 Public	485	121	25%
	University of Phoenix-Arizona	AZ			4 Private (FP)	1,057	121	11%
22	Professional Technical Institution	PR			>2 Private (FP)	111	111	100%
23	Brazosport College	TX	*		4 Public	237	109	46%
24	Austin Community College District	TX	*	**	4 Public	349	108	31%
25	Tarrant County College District	TX	*		2 Public	442	106	24%
	Total Top 25:					14,774	5,807	39%

FAST FACTS

Of the top 25 institutions where Latinos earned STEM certificates in 2019-20:

- The majority (19) were public institutions
- 19 were Hispanic-Serving Institutions (HSIs)

- 4 earned the Seal of Excelencia
- Texas had the most institutions (11), followed by Florida (5), and California (3)
- Latino representation ranged from 10% to 100% and overall was 39%

⁸ FP refers to for-profit

TOP INSTITUTIONS AWARDING STEM ASSOCIATE DEGREES TO LATINOS ACADEMIC YEAR: 2019-20

	Institutions	State	HSI	Seal	Sector	Total Degrees Awarded	Total Degrees: Hispanics	% Total Degrees: Awarded
1	South Texas College	TX	*	**	4 Public	535	504	94%
2	San Jacinto Community College	TX	*		4 Public	831	454	55%
3	Texas State Technical College	TX	*		2 Public	828	379	46%
4	El Paso Community College	TX	*	**	2 Public	349	288	83%
5	Long Beach City College	CA	*	**	2 Public	423	228	54%
6	Bakersfield College	CA	*		4 Public	417	226	54%
7	CUNY LaGuardia Community College	NY	*		2 Public	642	220	34%
8	Houston Community College	TX	*		2 Public	943	206	22%
9	Northern Virginia Community College	VA			2 Public	1,128	200	18%
10	College of Southern Nevada	NV	*		4 Public	648	195	30%
11	Reedley College	CA	*		2 Public	260	189	73%
12	Dallas College	TX	*		4 Public	376	178	47%
13	CUNY New York City College of Technology	NY	*		4 Public	555	172	31%
14	CUNY Borough of Manhattan Community College	NY	*		2 Public	536	167	31%
15	Austin Community College District	TX	*	**	4 Public	566	166	29%
16	Hartnell College	CA	*		2 Public	196	165	84%
17	Antelope Valley College	CA	*		4 Public	288	145	50%
	Truckee Meadows Community College	NV	*		4 Public	573	145	25%
19	Lee College	TX	*		2 Public	315	132	42%
20	Del Mar College	TX	*		2 Public	183	127	69%
	Instituto Tecnologico de Puerto Rico-Recinto de Ponce	PR	*		2 Public	127	127	100%
22	Fresno City College	CA	*		2 Public	266	123	46%
23	Glendale Community College	AZ	*		2 Public	325	117	36%
24	College of the Canyons	CA	*		2 Public	298	116	39%
25	Santa Barbara City College	CA	*		2 Public	318	110	35%
	Total Top 25:					11,926	5,079	43%

FAST FACTS

Of the top 25 institutions where Latinos earned STEM associate degrees in 2019-20: $\,$

- All were public institutions
- 24 were Hispanic-Serving Institutions (HSIs)

- 4 earned the Seal of Excelencia
- Texas (9) and California (8) had the most institutions, followed by New York (3)
- Latino representation ranged from 18% to 100% and overall was 43%

TOP INSTITUTIONS AWARDING STEM BACCALAUREATE DEGREES TO LATINOS ACADEMIC YEAR: 2019-20

	Institutions	State	HSI	Seal	Sector	Total Degrees Awarded	Total Degrees: Hispanics	% Total Degrees: Awarded
1	Florida International University	FL	*	**	4 Public	2,307	1,645	71%
2	Texas A & M University-College Station	TX			4 Public	4,292	979	23%
3	The University of Texas Rio Grande Valley	TX	*	**	4 Public	1,023	898	88%
4	University of Puerto Rico-Mayaguez	PR	*		4 Public	912	871	96%
5	The University of Texas at El Paso	TX	*	**	4 Public	1,056	822	78%
6	Arizona State University	ΑZ	*	**	4 Public	4,078	755	19%
7	University of Central Florida	FL	*	**	4 Public	2,619	720	27%
8	University of Houston	TX	*		4 Public	2,323	698	30%
9	University of Florida	FL			4 Public	3,118	676	22%
10	The University of Texas at San Antonio	TX	*	**	4 Public	1,388	662	48%
11	California State Polytechnic University- Pomona	CA	*		4 Public	1,808	646	36%
12	The University of Texas at Austin	TX	*	**	4 Public	3,574	629	18%
13	University of California-Riverside	CA	*	**	4 Public	1,817	604	33%
14	University of California-Irvine	CA	*		4 Public	3,414	603	18%
15	California State University-Long Beach	CA	*	**	4 Public	1,551	532	34%
16	University of California-San Diego	CA			4 Public	3,775	523	14%
17	California State University-Los Angeles	CA	*	**	4 Public	932	511	55%
18	University of California-Los Angeles	CA			4 Public	3,424	506	15%
19	University of South Florida	FL			4 Public	2,512	499	20%
20	University of California-Santa Cruz	CA	*		4 Public	2,153	465	22%
21	University of California-Davis	CA			4 Public	3,022	462	15%
22	University of Arizona	ΑZ	*	**	4 Public	2,067	444	21%
23	California State University-Northridge	CA	*	**	4 Public	1,212	396	33%
24	Texas Tech University	TX	*		4 Public	1,610	387	24%
25	San Diego State University	CA	*	**	4 Public	1,574	376	24%
	Total Top 25:					57,561	16,309	28%

FAST FACTS

Of the top 25 institutions where Latinos earned STEM baccalaureate degrees in 2019-20:

- All were public institutions
- 19 were Hispanic-Serving Institutions (HSIs)

- 13 earned the Seal of Excelencia
- California (11) had the most institutions, followed by Texas
 (7) and Florida (4)
- Latino representation ranged from 14% to 96% and overall was 28%

TOP INSTITUTIONS AWARDING STEM MASTER'S DEGREES TO LATINOS ACADEMIC YEAR: 2019-20

	Institutions	State	HSI	Seal	Sector	Total Degrees Awarded	Total Degrees: Hispanics	% Total Degrees: Awarded
1	Florida International University	FL	*	**	4 Public	408	162	40%
2	Western Governors University	UT			4 Private (NFP) ⁹	1,531	136	9%
3	Universidad Politecnica de Puerto Rico	PR	*		4 Private (NFP)	134	134	100%
4	The University of Texas at El Paso	TX	*	**	4 Public	220	132	60%
5	Georgia Institute of Technology-Main Campus	GA			4 Public	3,153	130	4%
6	Johns Hopkins University	MD			4 Private (NFP)	2,165	122	6%
7	University of Florida	FL			4 Public	1,225	104	8%
	University of Maryland Global Campus	MD			4 Public	1,471	104	7%
9	New York University	NY			4 Private (NFP)	2,829	102	4%
10	Texas A & M University-College Station	TX			4 Public	1,415	99	7%
11	Stanford University	CA			4 Private (NFP)	1,323	87	7%
12	University of Southern California	CA			4 Private (NFP)	2,835	85	3%
13	University of Central Florida	FL	*	**	4 Public	550	84	15%
14	Boston University	MA			4 Private (NFP)	1,673	79	5%
15	University of South Florida	FL			4 Public	807	78	10%
16	University of Michigan-Ann Arbor	MI			4 Public	1,862	74	4%
17	University of Miami	FL			4 Private (NFP)	463	71	15%
18	The University of Texas Rio Grande Valley	TX	*	**	4 Public	113	70	62%
	University of California-San Diego	CA			4 Public	1,484	70	5%
	University of Illinois Urbana-Champaign	IL			4 Public	1,827	70	4%
21	California State University-Long Beach	CA	*	**	4 Public	317	68	21%
	University of Washington-Seattle Campus	WA			4 Public	1,474	68	5%
23	California State University-Los Angeles	CA	*	**	4 Public	226	66	29%
	University of Arizona	ΑZ	*	**	4 Public	512	66	13%
25	Cornell University	NY			4 Private (NFP)	1,532	65	4%
	Total Top 25:					31,549	2,326	7%

FAST FACTS

Of the top 25 institutions where Latinos earned STEM master's degrees in 2019-20:

- The majority (16) were public institutions
- 8 were Hispanic-Serving Institutions (HSIs)

- 7 earned the Seal of Excelencia
- Florida (5) and California (5) had the most institutions, followed by Texas (3)
- \blacksquare Latino representation ranged from 3% to 100% and overall was 7%

⁹ NFP refers to not-for-profit

TOP INSTITUTIONS AWARDING STEM DOCTORATE DEGREES TO LATINOS ACADEMIC YEAR: 2019-20

	Institutions	State	HSI	Seal	Sector	Total Degrees Awarded	Total Degrees: Hispanics	% Total Degrees: Awarded
1	University of Michigan-Ann Arbor	MI			4 Public	584	42	7%
2	The University of Texas at El Paso	TX	*	**	4 Public	69	33	48%
3	Stanford University	CA			4 Private (NFP) ¹⁰	581	29	5%
4	University of California-Berkeley	CA			4 Public	501	28	6%
	University of California-San Diego	CA			4 Public	419	28	7%
6	Harvard University	MA			4 Private (NFP)	343	25	7%
7	University of Puerto Rico-Rio Piedras	PR	*		4 Public	26	22	85%
8	University of California-Irvine	CA	*		4 Public	277	20	7%
	University of Florida	FL			4 Public	354	20	6%
	University of Illinois Urbana-Champaign	IL			4 Public	525	20	4%
	University of Wisconsin-Madison	WI			4 Public	377	20	5%
12	University of Arizona	AZ	*	**	4 Public	198	19	10%
	University of California-Davis	CA			4 Public	325	19	6%
14	Columbia University in the City of New York	NY			4 Private (NFP)	324	18	6%
	Texas A & M University-College Station	TX			4 Public	492	18	4%
16	Massachusetts Institute of Technology	MA			4 Private (NFP)	478	17	4%
17	Arizona State University	AZ	*	**	4 Public	284	16	6%
	The University of Texas at Austin	TX	*	**	4 Public	393	16	4%
19	The Pennsylvania State University	PA			4 Public	402	15	4%
20	Duke University	NC			4 Private (NFP)	226	14	6%
	University of California-Los Angeles	CA			4 Public	359	14	4%
	University of Washington-Seattle Campus	WA			4 Public	413	14	3%
23	Georgia Institute of Technology-Main Campus	GA			4 Public	465	13	3%
	Johns Hopkins University	MD			4 Private (NFP)	314	13	4%
	Purdue University-Main Campus	IN			4 Public	570	13	2%
	University of South Florida	FL			4 Public	165	13	8%
	Total Top 25:					8,880	477	5%

FAST FACTS

Of the top 25 institutions where Latinos earned STEM doctorate degrees in 2019-20:

- The majority (20) were public institutions
- 6 were Hispanic-Serving Institutions (HSIs)

- 4 earned the Seal of Excelencia
- California (6) had the most institutions, followed by Texas (3) and Arizona (2)
- Latino representation ranged from 2% to 85% and overall was 5%

10 NFP refers to not-for-profit

CALL TO ACTION IN STEM

The opportunity exists for institutions and employers to make intentional connections to strengthen efforts to develop and recruit Latino talent. Additionally, institutions and employers can build strategic partnerships to facilitate the development and selection of Latino talent into the current and future workforce.

FOR EMPLOYERS

Latinos are an essential population to help advance the nation's economy. Our growing knowledge-based economy calls for employers to have intentional relationships with institutions who are producing Latino talent to create a talent ecosystem that increases Latino, and all, groups representation in the workforce.

Invest in the Creation of Latino Talent

Ecosystems. Employers can invest in career pathways by providing paid internships, scaling up scholarships, expanding clinical opportunities, and committing to hiring local Latino talent.

Establish Common Cause with Institutions.

Employers can be proactive in aligning their goals with the institutions they partner with by leveraging effective recruitment strategies that account for diverse student experiences and institutional outcomes.

Integrate Data Sources with Institutions.

Employers can work with institutions to identify and integrate data sources that are more comprehensive and robust. These data sources can track post-completion success of new hires and help identify needs within industry and academic programs.

Connect Current Employees with Future Hires.

Employers can connect current employees with their graduating institution to help current undergraduate students make informed post-completion decisions.

■ Connect with Faculty. Employers can increase their engagement with faculty by offering faculty tours of their facilities, engaging in regular industry discussions, informing curricular design as advisors, and coordinating with faculty on paid student internships.

As a result, employers who partner with institutions are likely to see the benefit of creating ecosystems that promote and attract diversity, foster resilience, and hire local talent from local institutions. Employers who take action to connect with institutions are also likely to experience potential benefits such as an increased understanding of workplace culture by new employees, strengthened practices for recruitment, and validated fit between Latino talent and the employer.

FOR INSTITUTIONS

Institutions have an active role in Latino post-completion success by developing Latino talent for a global economy. Our growing knowledge-based economy calls for institutions to go beyond completion and take active steps to intentionally serve Latino talent through intentional post-completion services and strengthening their employer partnerships.

■ Invest in Post-Completion Wrap-Around

Services. Institutions have an opportunity to invest in services that support students after completion. Students completing their education can benefit from wrap-around services such as career mentorship, job placement support, ongoing professional development, continued access to career services, and connections to professional networks within their department and college.

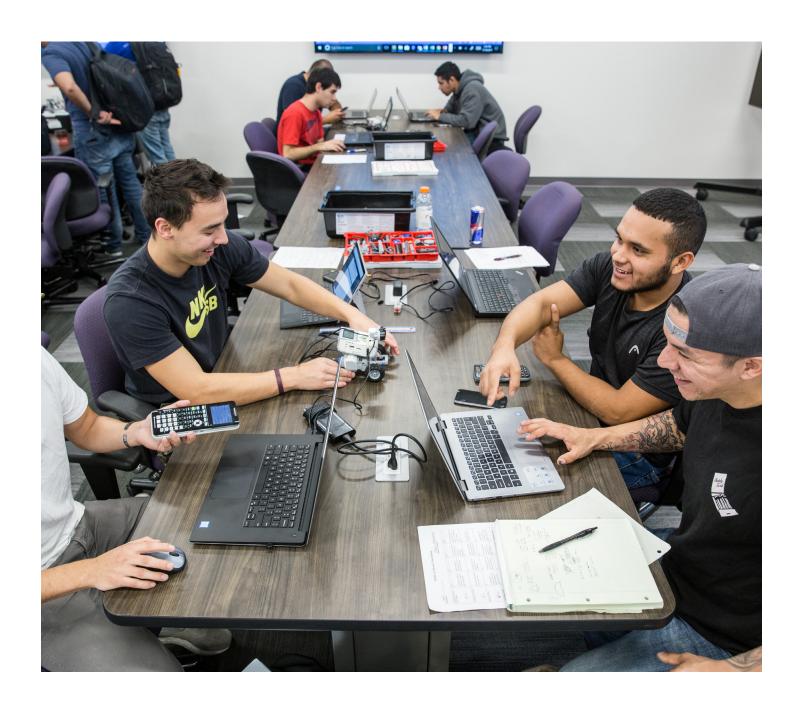
■ Take Inventory of Existing Employer

Partnerships. Institutions have an opportunity to take stock of their current employer relations. An internal analysis of current employer relations can highlight institutional strengths with employers (e.g., strategies and practices) and identify opportunities to connect with new industries to intentionally serve Latino, and all, students.

■ Include Career and Workforce Experiences as Post-Completion Success Outcomes. While most programs and practices often provide completion outcomes, institutions have an opportunity to assess and evaluate how their intentional workforce strategies and practices impact Latino, and all, students after completion and disaggregate their post-completion outcomes data to identify trends and patterns.

■ Build Institutional Partnerships to Strengthen the Latino Talent Pipeline. Institutions have an opportunity to recruit from other institutions that yield high Latino enrollment and completion rates. In doing so, institutional partnerships can strengthen the Latino talent pipeline through shared data agreements, aligned curriculum, and opportunities to connect with employers.

As a result, institutions have an opportunity to work with other institutions and employers to clarify and align postcompletion pathways towards career goals and opportunities that work in tandem with career preparation activities to intentionally serve Latino students beyond completion. Institutions with a focus on post-completion success are likely to experience stronger post-completion outcomes, increased student satisfaction, a stronger alumni base, and higher donorship from alumni.



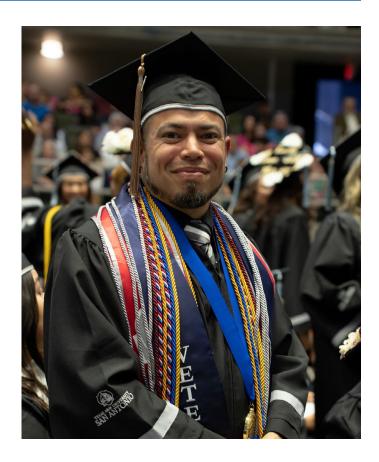
ENSURING AMERICA'S FUTURE BY INCREASING LATINO COLLEGE COMPLETION

An emphasis on college degree attainment by the Biden Administration, and major foundations including the Bill & Melinda Gates Foundation and the Lumina Foundation, reflects the growing recognition that increasing college completion is key to future prosperity. Given current educational attainment levels for Latinos, demands for economic competitiveness, and projected Latino demographic growth in the United States, increasing American college degree attainment is vital.

According to the Bureau of Labor Statistics, only 33 percent of Hispanics in the United States had earned an associate degree or higher in 2020. In comparison, 73 percent of Asians, 54 percent of Whites, and 45 percent of African Americans had earned an associate degree or higher in 2020. Further, demographic predictions show Latinos will represent 24 percent of the U.S. civilian labor force by 2031. In combination, these facts create a compelling call to action.

To meet this challenge, Excelencia in Education is shaping a policy strategy with measures, tactics, and strategies focused on young adults generally, and Latino students specifically. The initiative, Ensuring America's Future by Increasing Latino College Completion (EAF) brings to the forefront of public attention the role Latinos play in meeting the country's college degree completion goal. With over 170 institutions and systems of higher education—the coalition is actively collaborating for collective impact to increase Latino college completion.

Excelencia in Education is uniquely positioned to tackle this challenge in several ways. By using its voice and convening power, Excelencia makes the case for the importance of getting Latino students to and through college. It has



expanded its information role to track progress towards Latino college degree completion, as well as engage stakeholders at national, state, and institutional levels in purposeful deliberations to develop and deploy a policy roadmap to accelerate Latino college degree completion.

Accelerating Latino college degree completion requires: (1) intentionality in serving this group of students; (2) delineation of degree completion goals and measures of progress; (3) commitment to practices and policies that produce positive results; and, (4) clarity about the federal, state, and institutional policy environments that affect Latino student success. There is a role for all stakeholders committed to increasing U.S. college degree completion.

FOR MORE INFORMATION PLEASE VISIT:

www.EdExcelencia.org/research/latino-college-completion

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APPENDIX 1

STEM PROGRAM CIP CODES

The following lists the STEM programs identified in the IPEDS dataset for 2019-20, aggregated to identify the top institutions conferring degrees to Latinos.

SCIENCE

26 - BIOLOGICAL AND BIOMEDICAL SCIENCES.

- 26.01 Biology, General.
- 26.02 Biochemistry, Biophysics and Molecular Biology.
- 26.03 Botany/Plant Biology.
- 26.04 Cell/Cellular Biology and Anatomical Sciences.
- 26.05 Microbiological Sciences and Immunology.
- 26.07 Zoology/Animal Biology.
- 26.08 Genetics.
- 26.09 Physiology, Pathology and Related Sciences.
- 26.10 Pharmacology and Toxicology.
- 26.11 Biomathematics, Bioinformatics, and Computational Biology.
- 26.12 Biotechnology.
- 26.13 Ecology, Evolution, Systematics, and Population Biology.
- 26.14 Molecular Medicine.
- 26.15 Neurobiology and Neurosciences.
- 26.99 Biological and Biomedical Sciences, Other.

40 - PHYSICAL SCIENCES.

- 40.01 Physical Sciences, General.
- 40.02 Astronomy and Astrophysics.
- 40.04 Atmospheric Sciences and Meteorology.
- 40.05 Chemistry.
- 40.06 Geological and Earth Sciences/Geosciences.
- 40.08 Physics.
- 40.10 Materials Sciences.
- 40.11 Physics and Astronomy.
- 40.99 Physical Sciences, Other.

TECHNOLOGY

11 - COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES.

- 11.01 Computer and Information Sciences, General.
- 11.02 Computer Programming.
- 11.03 Data Processing.
- 11.04 Information Science/Studies.
- 11.05 Computer Systems Analysis.
- 11.06 Data Entry/Microcomputer Applications.
- 11.07 Computer Science.
- 11.08 Computer Software and Media Applications.
- 11.09 Computer Systems Networking and

Telecommunications.

- 11.10 Computer/Information Technology Administration and Management.
- 11.99 Computer and Information Sciences and Support Services, Other.

41 - SCIENCE TECHNOLOGIES/TECHNICIANS.

- 41.00 Science Technologies/Technicians, General.
- 41.01 Biology/Biotechnology Technologies/Technicians.
- 41.02 Nuclear and Industrial Radiologic Technologies/ Technicians.
- 41.03 Physical Science Technologies/Technicians.
- 41.99 Science Technologies/Technicians, Other.

ENGINEERING

14 - ENGINEERING.

- 14.01 Engineering, General.
- 14.02 Aerospace, Aeronautical, and Astronautical/Space Engineering.
- 14.03 Agricultural Engineering.
- 14.04 Architectural Engineering.
- 14.05 Biomedical/Medical Engineering
- 14.06 Ceramic Sciences and Engineering.
- 14.07 Chemical Engineering.
- 14.08 Civil Engineering.
- 14.09 Computer Engineering.

14 - ENGINEERING. (CONTINUED)

- 14.10 Electrical, Electronics, and Communications Engineering.
- 14.11 Engineering Mechanics.
- 14.12 Engineering Physics.
- 14.13 Engineering Science.
- 14.14 Environmental/Environmental Health Engineering.
- 14.18 Materials Engineering.
- 14.19 Mechanical Engineering.
- 14.20 Metallurgical Engineering.
- 14.21 Mining and Mineral Engineering.
- 14.22 Naval Architecture and Marine Engineering.
- 14.23 Nuclear Engineering.
- 14.24 Ocean Engineering.
- 14.25 Petroleum Engineering.
- 14.27 Systems Engineering.
- 14.28 Textile Sciences and Engineering.
- 14.32 Polymer/Plastics Engineering.
- 14.33 Construction Engineering.
- 14.34 Forest Engineering.
- 14.35 Industrial Engineering.
- 14.36 Manufacturing Engineering.
- 14.37 Operations Research.
- 14.38 Surveying Engineering.
- 14.39 Geological/Geophysical Engineering.
- 14.40 Paper Science and Engineering.
- 14.41 Electromechanical Engineering.
- 14.42 Mechatronics, Robotics, and Automation Engineering.
- 14.43 Biochemical Engineering.
- 14.44 Engineering Chemistry.
- 14.45 Biological/Biosystems Engineering.
- 14.47 Electrical and Computer Engineering.
- 14.48 Energy Systems Engineering.
- 14.99 Engineering, Other.

15 - ENGINEERING/ENGINEERING-RELATED TECHNOLOGIES/TECHNICIANS.

- 15.00 Engineering Technologies/Technicians, General.
- 15.01 Architectural Engineering Technologies/Technicians.
- 15.02 Civil Engineering Technologies/Technicians.
- 15.03 Electrical/Electronic Engineering Technologies/ Technicians.
- 15.04 Electromechanical Technologies/Technicians.
- 15.05 Environmental Control Technologies/Technicians.
- 15.06 Industrial Production Technologies/Technicians.
- 15.07 Quality Control and Safety Technologies/Technicians.
- 15.08 Mechanical Engineering Related Technologies/ Technicians.
- 15.09 Mining and Petroleum Technologies/Technicians.
- 15.10 Construction Engineering Technology/Technician.
- 15.11 Engineering-Related Technologies/Technicians.
- 15.12 Computer Engineering Technologies/Technicians.
- 15.13 Drafting/Design Engineering Technologies/Technicians.
- 15.14 Nuclear Engineering Technology/Technician.
- 15.15 Engineering-Related Fields.
- 15.16 Nanotechnology.
- 15.17 Energy Systems Technologies/Technicians.
- 15.99 Engineering/Engineering-Related Technologies/ Technicians, Other.

MATHEMATICS

27 - MATHEMATICS AND STATISTICS.

- 27.01 Mathematics.
- 27.03 Applied Mathematics.
- 27.05 Statistics.
- 27.06 Applied Statistics.
- 27.99 Mathematics and Statistics, Other.





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