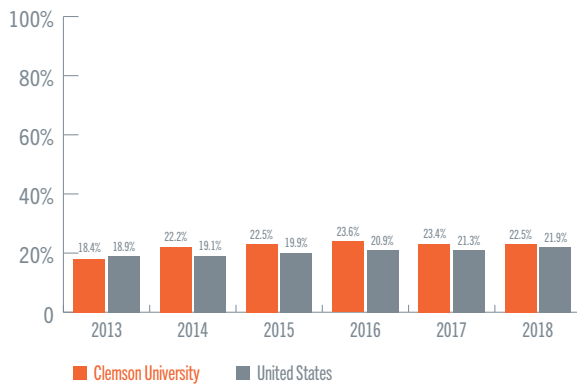


In Clemson University's College of Engineering, Computing and Applied Sciences (CECAS), Programs for Educational Enrichment and Retention (PEER) and Women in Science and Engineering (WISE) work to advance diversity and inclusion in the Science, Technology, Engineering and Math (STEM) fields. PEER and WISE are two of the oldest, most established diversity programs at Clemson University, a Research I land-grant institution. PEER and WISE provide learning centers, mentorship programs and other support for women and underrepresented populations in STEM at Clemson.

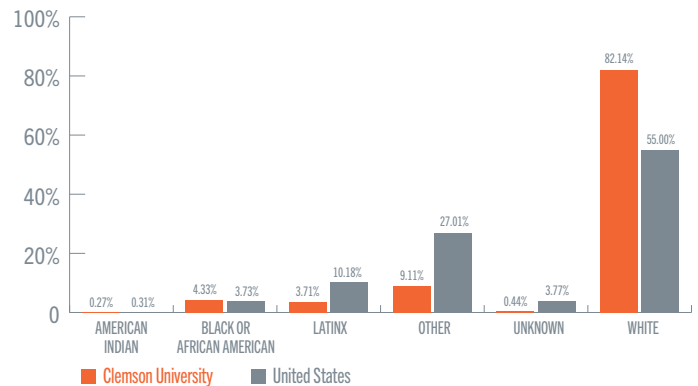
Diversity in STEM Degrees

Women and African-Americans enter STEM majors at a lower rate than their counterparts and graduate with STEM majors at lower rates as well, which indicates that there are additional barriers within college that push women and minorities away from STEM. ⁽²⁾

PERCENTAGE OF **WOMEN** AWARDED ENGINEERING & COMPUTER SCIENCE BACHELOR'S DEGREES⁽¹⁾



PERCENTAGE OF ENGINEERING & COMPUTER SCIENCE BACHELOR'S DEGREES AWARDED **BY ETHNICITY** IN 2018 ⁽¹⁾



STEM in the Workforce

There were nearly 8.9 million STEM jobs in May 2017, representing 6.2 percent of U.S. employment. **Employment in STEM occupations is projected to increase by 10.9 percent** (faster than average) from 2016 to 2026. **This growth is expected to result in 1 million new jobs.** ⁽³⁾

Nearly **HALF** of the people in life, physical, and social science occupations are women. ⁽³⁾

About **1 in 4** people working in computer and mathematical occupations are women. ⁽³⁾

About **1 in 6** people working in architecture and engineering occupations are women. ⁽³⁾

As of 2017, while women account for about half (52%) of the college-educated workforce, **women still occupy less than 30%** of the jobs in all the science and engineering fields. ⁽⁴⁾

African Americans are severely underrepresented in the STEM workforce – 6% compared with 11% in the general workforce. Latinx also – 6% compared with 16% in the general workforce. ⁽⁴⁾

As of 2017, underrepresented minorities (URM) occupy **13%** of all the jobs in the science and engineering fields, **below** their share of the college educated workforce (17%). ⁽⁴⁾

Psychology and social sciences is the only field where URM occupy more than **15%** of the jobs (about **1 in 5** people working in psychology and social science are URM). ⁽⁴⁾

In life science, physical science, engineering, computer science and math URM occupy **less than a seventh** of all the jobs. ⁽⁴⁾

“WISE defined a major portion of my Clemson experience – first as a mentee, then as a mentor, tutor, office staff member, and scholarship recipient. I made so many amazing friends in Freeman Hall! WISE helped cement the importance of supporting other women, especially young women interested in STEM fields.”

HEATHER SPRAGUE '13
B.S. Biosystems Engineering
Engineering Specialist, Coastal Flood Risk Management, Arcadis U.S., Inc.

“PEER helped me to feel connected at a large school and surrounded me with peers who had similar goals. In the ‘real world’, I have been reminded though statistics or comments how rare it is to be an African American female Chemical Engineer. Because of PEER, I saw others doing the same thing and it felt very normal to me to be around diverse science and engineering majors. There was always support and never the feeling that my peers and I wouldn’t achieve our goals. PEER believed in us and helped prepare us for our educational and career next steps.

BRANDI MOBLEY '97
B.S. Chemical Engineering
Program Manager, Business Integration, US Operations at McDonald’s

“[PEER] united me with students from all over the country, and it provided me with a sense of family INSIDE of the Clemson family.”

JASON J. GAMBLE, P.E. '00
B.S. Civil Engineering
Exam Development Engineer, National Council of Examiners for Engineering and Surveying (NCEES)

“I remember my first meeting with our entire group. I really didn’t know what to expect. Walking away from the meeting and knowing there was someone on campus who cared about my success was important.”

RODNEY DINKINS '98
B.S. Electrical Engineering
Engineering Manager, Cardinal Health

Employment in STEM Occupations, 2018 and projected 2028⁽⁵⁾

Occupation Category	Employment	
	2018	2028
Total, all occupations	161,037.7	169,435.9
STEM occupations	9,708.3	10,566.8
Non-STEM occupations	151,329.4	158,869.1

(Numbers in thousands)

STEM employment in the United States — made up of occupations like software developers, computer system analysts, chemists, mathematicians, economists, psychologists and engineers—has **grown more rapidly than the workforce overall** and now represents **6% (about 9 million)** of all U.S. jobs. Those numbers are anticipated to increase by **8.8%** by 2028, whereas non-STEM occupations are predicted to grow by only 5%.

In 2019, the median annual salary in STEM occupations (across workers at all education levels) was \$86,980 which is **more than double the median for all U.S. workers** (\$39,810) as well as non-STEM occupations (\$39,160).

(1) “National Benchmark Reports.” Department of Institutional Research and Analytics, American Society for Engineering Education, www.ira.asee.org/national-benchmark-reports/; “Student Demographics.” Clemson University Interactive Factbook, Clemson University Office of Institutional Research, www.clemson.edu/institutional-effectiveness/oir/factbook/index.html.

(2) Carnevale, Anthony P, et al. “STEM: Science, Technology, Engineering, and Mathematics.” CEW Georgetown, 20 Oct. 2011, www.cew.georgetown.edu/cew-reports/stem/.

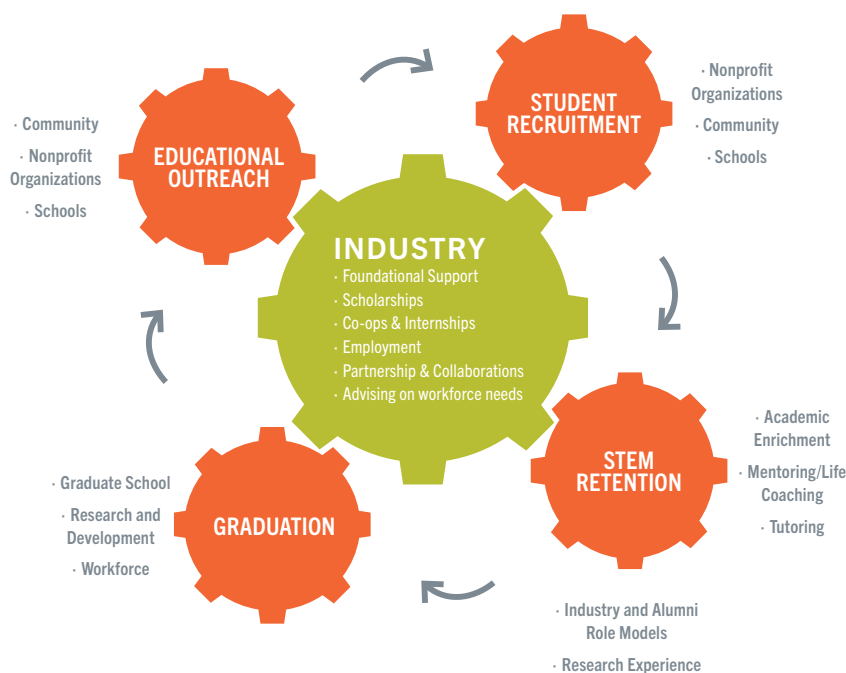
(3) “Celebrating Women in STEM Occupations | Commissioner’s Corner.” U.S. Bureau of Labor Statistics, U.S. Bureau of Labor Statistics, 6 Mar. 2019, www.beta.bls.gov/labs/blogs/2019/03/06/celebrating-women-in-stem-occupations/.

(4) Khan, Beethika, et al. “The State of U.S. Science and Engineering 2020.” NSF, 15 Jan. 2020, www.ncses.nsf.gov/pubs/nsb20201/u-s-s-e-workforce#women_and-underrepresented-minorities.

(5) “Employment in STEM Occupations.” U.S. Bureau of Labor Statistics, U.S. Bureau of Labor Statistics, 15 Apr. 2020, www.bls.gov/emp/tables/stem-employment.htm.

PEER & WISE Theory of Change in Practice

The main objective of PEER and WISE is to provide students successful programs and services, equipping them with the resources they need to excel at Clemson University and preparing them for life after graduation.



PEER & WISE
CLEMSON UNIVERSITY

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