K-12 Education

Girls and boys do not significantly differ in their abilities in mathematics and science, but do differ in their interest and confidence in STEM subjects. Male students are over three times more likely to be interested in STEM majors and careers, compared to female students.1

In 2009, girls and boys earned credits in advanced mathematics and science at similar rates. However, gender differences in advanced coursetaking varied by subject:

- More females than males took advanced biology (50% versus 39%).2
- Males took physics at higher rates than females (42% versus 36%).2
- Males were 6 times more likely to have taken engineering (6% versus 1%).2

Higher Education

The rates of science and engineering (S&E) coursetaking for women shift at the undergraduate level and gender disparities begin to emerge.

Within S&E, men and women tend to study different fields. Men earn a majority of bachelor’s degrees awarded in:

- Engineering: 82% (men) versus 19% (women)
- Computer sciences: 81% (men) versus 18% (women)
- Physics: 81% (men) versus 19% (women)

Women earn a majority of bachelor’s degrees in psychology, biological sciences, and social sciences. 1

Underrepresented minority women make up 16% of the population, but only earn:

- 3% of bachelor’s degrees in engineering
- 5% of bachelor’s degrees in computer sciences
- 7% of bachelor’s degrees in physical sciences 2

STEM Workforce

Women remain underrepresented in the science and engineering workforce, with the greatest disparities occurring in engineering and computer sciences.

Women constitute 47% of the overall workforce and 28% of the S&E workforce.1

Female scientists and engineers are concentrated in different occupations than men, with relatively high shares of women in the social sciences (58%), and life sciences (48%), and relatively low shares in computer and mathematical sciences (25%), and engineering (13%).1

Minority women comprise fewer than 1 in 10 employed scientists and engineers.2

1 STEMconnector & My College Options. (2013). Where are the STEM Students? What are their Career Interests? Where are the STEM Jobs?