



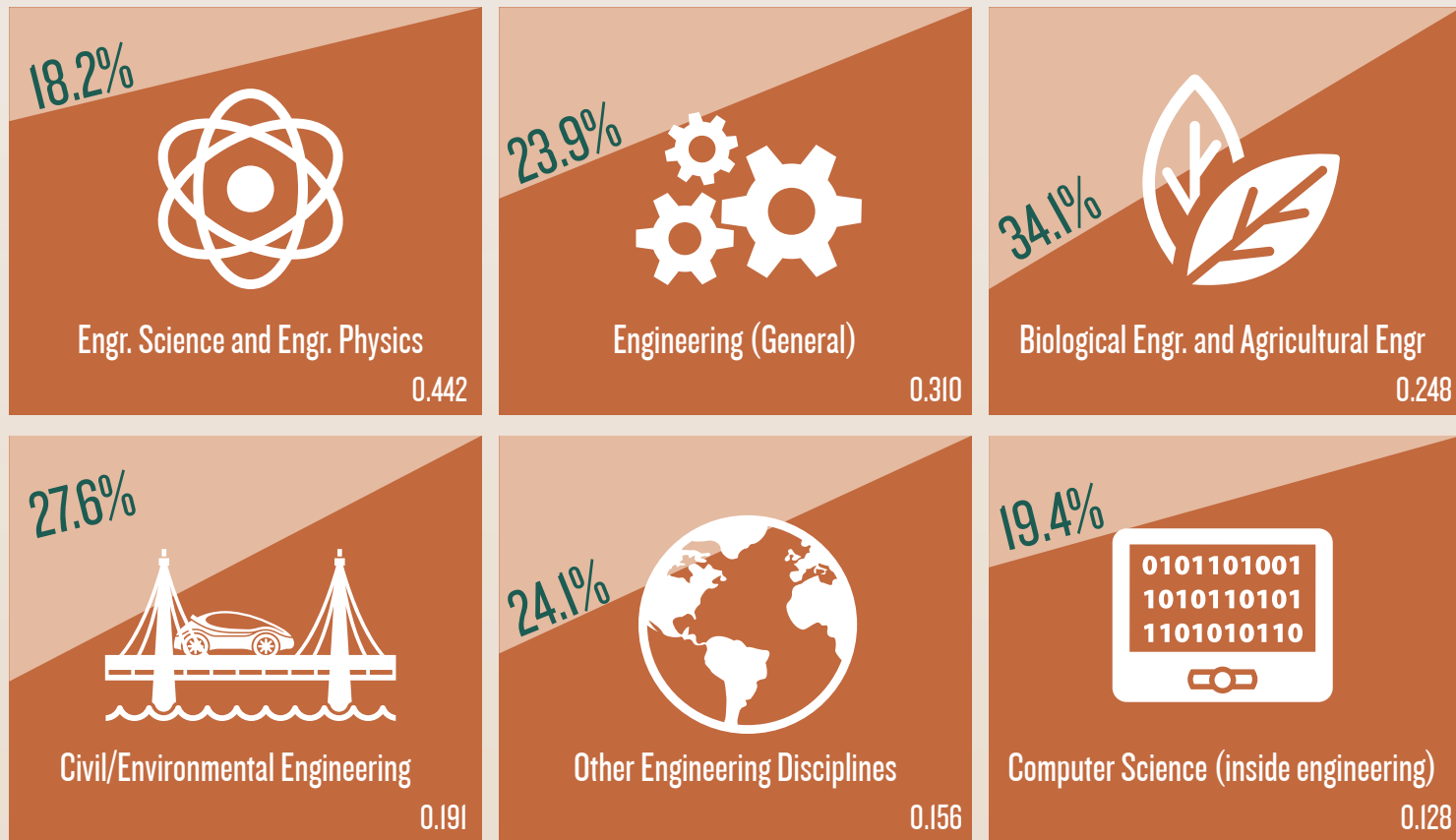
WOMEN'S INFLUENCE

RELATIONSHIP BETWEEN FACULTY DIVERSITY AND FEMALE GRADUATION RATES IN BACHELOR DEGREE PROGRAMS (2005-2013)

Proportion of female assistant professors by disciplines (2013)

DISCIPLINE

Relationship between the proportion of women engineering faculty and female graduation rates.



A sure way to graduate more women engineers is to have more women faculty members, right? Answer: Not always. ASEE data analysts used a data mining tool to explore the relationship between gender diversity in the university faculty pool and the rate of female students graduating from bachelor's degree programs. Extracting faculty and graduation data between 2005 and 2013, they applied the Pearson correlation coefficient, which measures linear association between two quantitative variables, to find the relationship between the proportion of female faculty and the rates of female graduates in each of 22 engineering disciplines. They found a correlation between the proportions of women faculty members and women's graduation rates in disciplines that traditionally have low proportions of female faculty, such as engineering science and engineering physics, engineering (general), computer science (inside engineering), aerospace, and civil engineering. However, they did not find a similar correlation in disciplines that traditionally attract a high number of female faculty members, such as engineering management, environmental, chemical, and biomedical engineering.

