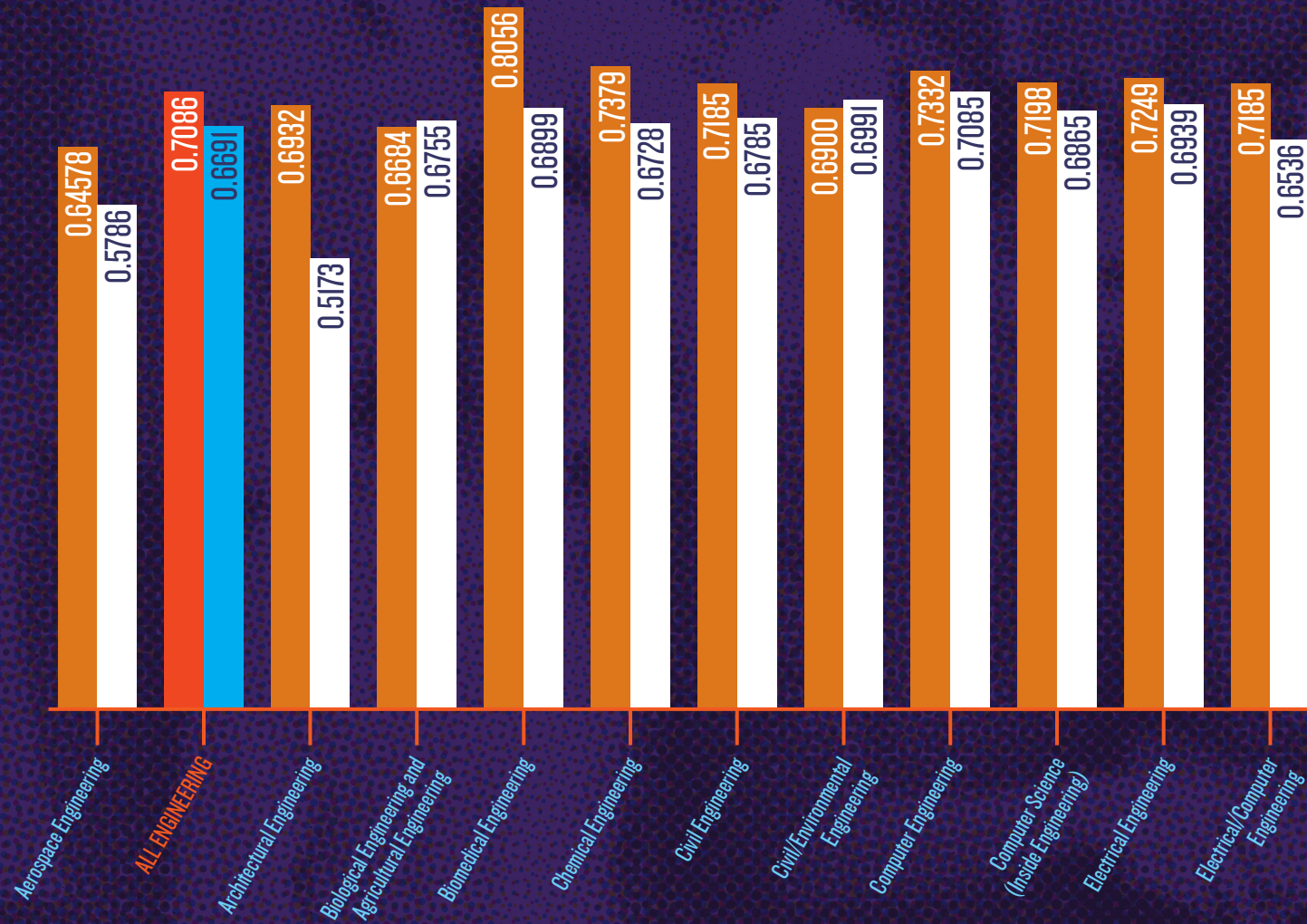


# Diversity Among FACULTY & STUDENTS

## KEY:

Student Diversity (Blau's Index)

Faculty Diversity (Blau's Index)



Blau's Index, named for sociologist Peter Blau, is a well-known tool for measuring heterogeneity in populations. When used to find the extent of gender and racial-ethnic diversity among students and faculty in engineering, it shows that, overall, diversity among students is slightly higher than among faculty. The formula  $D = 1 - \sum P_i^2$  was applied to data from ASEE's 2014 Profile survey.  $D$  denotes a discipline's overall diversity, and  $P_i$  is the proportion of group members in a particular category  $i$ . Two gender categories (male and female) and eight racial-ethnic categories (Caucasian, African-American, Asian, Hispanic, Pacific Islander, American-Indian, multi-racial, and other) were used to develop the measure of diversity. According to Blau's Index, a perfectly homogeneous

population would have a diversity index score of 0. A perfectly heterogeneous population would have a diversity index score of 1. The index generated an overall diversity index of the undergraduate student population of 0.7086, and an index of 0.6691 for faculty. Disciplines that appear to have an above average diversity index with respect to both student and faculty are: biomedical, industrial/manufacturing/systems, chemical, computer science, computer, electrical, and civil engineering. Mining, engineering science and engineering physics, nuclear, petroleum, and mechanical engineering appear to have the least diverse student population. Engineering science and engineering physics, architectural, nuclear, aerospace, and mining engineering have the least diverse faculty population.

