

Abstract for an Invited Paper  
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**Success in Undergraduate Engineering Programs: A Comparative Analysis by Race and Gender<sup>1</sup>**

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Interest in increasing the number of engineering graduates in the United States and promoting gender equality and diversification of the profession has encouraged considerable research on women and minorities in engineering programs. Drawing on a framework of intersectionality theory, this work recognizes that women of different ethnic backgrounds warrant disaggregated analysis because they do not necessarily share a common experience in engineering education. Using a longitudinal, comprehensive data set of more than 79,000 students who matriculated in engineering at nine universities in the Southeastern United States, this research examines how the six-year graduation rates of engineering students vary by disaggregated combinations of gender and race/ethnicity. Contrary to the popular opinion that women drop out of engineering at higher rates, our results show that Asian, Black, Hispanic, Native American, and White women who matriculate in engineering are as likely as men to graduate in engineering in six years. In fact, Asian, Black, Hispanic, and Native American women engineering matriculants graduate at higher rates than men and there is a small difference for white students. 54 percent of White women engineering matriculants graduate in six-years compared with 53 percent of white men. For male and female engineering matriculants of all races, the most likely destination six years after entering college is graduation within engineering. This work underscores the importance of research disaggregated by race and gender and points to the critical need for more recruitment of women into engineering as the low representation of women in engineering education is primarily a reflection of their low representation at matriculation.

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