**FAMU-FSU College of Engineering Entrance Exam Waiver 10.29.19**

The FAMU-FSU College of Engineering requests to offer a waiver of the graduate admissions entrance exam requirement for our select, outstanding FAMU-FSU Engineering students and alums applying to **Engineering master’s thesis degrees or doctoral degree programs**. Currently, GRE scores are only one of several factors that are considered when evaluating prospective students. Other heavily weighted factors include previous research experience, relevant course work, letters of recommendation, relevant employment, and upper-division GPA. We are requesting a GRE waiver based on a growing body of research that finds only a weak correlation between the GRE and success in STEM-related fields. We believe that waiving the GRE admission requirement for our current engineering students and alums will allow us to increase our pool of applicants, which in turn will help us achieve our goals of (i) admitting students who are highly likely to be successful in our doctoral program, (ii) increasing our ability to compete for our own highly qualified students where other engineering programs have already waived or do not require the GRE, and (iii) increasing the number of domestic, underrepresented students in our doctoral program.

# Proposed Criteria for a GRE Waiver

The graduate admissions entrance exam for Engineering (GRE) requirement will be waived for outstanding applicants meeting all of the following criteria:

1. FAMU-FSU Engineering student or alum.
2. Completed, or will complete, prior to matriculation in the graduate program a degree from the same department as the intended new graduate degree application.
3. Upper level, undergraduate or graduate GPA of 3.0 or above from same department as the intended new graduate degree application.
4. Recommendation/referral from a faculty member in the same department as the intended new graduate degree application.

If a program changes the above criteria in any way, the unit would have to seek approval from the FSU GPC and/or FAMU Graduate Council.

**Rationale for a GRE Waiver**

A growing body of research has questioned the predictive validity of GRE scores, particularly in STEM fields, with most studies reaching the conclusion that the GRE provides little objective information to reliably identify who will be successful in graduate school (Miller & Stassun, 2014). In support of this conclusion, a meta-analysis of 1753 independent studies conducted over 50 years found weak or negative correlations between GRE scores and indices of success in graduate school (Kuncel et al, 2001). Moreover, a recent study of 683 doctoral students in the Vanderbilt Interdisciplinary Graduate Program, which includes engineering and related doctoral programs, found that the GRE was not useful in predicting who will pass the doctoral qualifying exam, deliver more conference presentations, publish more first- author research papers, obtain an individual grant or fellowship, have a shorter time to degree, or earn the doctoral degree. In this same study, GRE scores were found to be a weak to moderate predictor of graduate GPA, whereas other measures, including undergraduate GPA, were found to be better predictors of success in graduate school (Moneta-Koehler et al, 2017). Similar results were obtained in another recent study of 280 doctoral students at the University of North Carolina at Chapel Hill (Hall et al, 2017). Based on their own and others’ findings, the authors concluded that “the most commonly used standardized test (the general GRE) is a particularly ineffective predictive tool”. Consistent with this research, the Educational Testing Service (ETS), which administers the GRE, discourages the use of GRE cut off scores for admissions, and acknowledges that the GRE does not predict other skills needed to succeed in a variety of graduate programs (GRE Guide to the Use of Scores 2015-2016; Enright & Gitomer, 1989).

There is also a concern that the GRE puts highly capable women and underrepresented groups at a competitive disadvantage for admission to graduate training programs (Benderly, 2017; Miller & Stassun, 2014; Moneta-Koehler et al, 2017). This is because scores on the GRE, similar to most standardized tests, reflect certain demographic characteristics, such as socioeconomic status, that are unrelated to academic preparation, intellectual capacity, and potential for academic success. This has led to test disparity, with women scoring an average of 80 points lower than men, and African Americans scoring an average of 200 points lower than Caucasian Americans (Miller & Stassun, 2014). Thus, the traditional focus on GRE scores and the misguided approach of using GRE minimum scores for admission may be a driving force for the continuing under-representation of women and minorities in graduate programs in general, and STEM fields in particular. Because this represents a relevant and ongoing concern for our engineering graduate program, we believe that waiving the GRE and including other criteria that are more predictive of future success and aptitude for research and academic performance will help us meet our goal of increasing diversity within our programs and allow us to retain our best and brightest.

# References

Benderly, B.L. (2017) GREs don’t predict grad school success. What does? *Science*. Retrieved from [https://www.sciencemag.org/careers/2017/06/gres-dont-predict-grad-school-success-what-does.](https://www.sciencemag.org/careers/2017/06/gres-dont-predict-grad-school-success-what-does)

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Hall, J.D., O’Connell, A.B., & Cook, J.G. (2017). Predictors of student productivity in biomedical graduate school applications. *PLoS ONE, 12(1),* e0169121.

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**Institutional Comparison**

[***Michigan Technology University***](https://www.mtu.edu/gradschool/prospective/apply-now/requirements/)***:*** The Graduate School does not have any Graduate Record Exam (GRE) or Graduate Management Admission Test (GMAT) requirement. Many programs publish, “Michigan Tech students are exempt.”

[**Florida Atlantic University:**](http://www.eng.fau.edu/graduate/index.php) Various Engineering departments waive for students with a degree from the same department at FAU.

[**Stanford University**](https://gradadmissions.stanford.edu/programs)**:** Some Engineering PhD programs waive, “GRE general test scores optional.”

[**MIT**](https://gradadmissions.mit.edu/programs/degrees/doctoral-degrees): Various PhD degrees “do not require” the GRE.

[**West Virginia University**](http://catalog.wvu.edu/graduate/collegeofengineeringandmineralresources/): Not required for applicants with undergraduate degree from US accredited institution. Varies by engineering programs.

[**Brown University:**](https://www.brown.edu/news/2019-10-03/gre)Brown eliminates GRE test requirement for 24 doctoral programs. In enabling Ph.D. program leaders to drop the requirement to submit test scores, the Graduate School looks to attract talented, high-achieving students from an increasingly diverse pool of candidates.

[**Cornell University**](https://gradschool.cornell.edu/degrees-fields/cugradfos/)**:** Programs have option to waive/require. Varies by programs. The following engineering programs waive: Biomedical, Environmental, Electrical, Systems, etc.