

Assessing Barriers to Pursuing a Degree in Geomatics Technology among Geomatics Students at the University of Florida

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Key words: Education; Young surveyor

SUMMARY

This research provides the results of our evidence-based study of the factors (including adopting a blended, geographically distributed education system) affecting Geomatics education, recruitment, and retention of low-income Geomatics students at the University of Florida. The study is part of the GeT-STEM project funded by the US National Science Foundation to support low-income students pursuing a Geomatics degree at the University of Florida. We conducted interviews with ten Geomatics students who agreed to participate in research regarding the UF Geomatics program in general and the GeT-STEM project more specifically. The interviews were the first step in a multi-step/multi-year, mixed-methods approach to data collection for students in the UF Geomatics program. The objective of the interviews was to assess the barriers such as financial, professional, academic, geographical (including proximity to education center), and cultural factors that are affecting the enrollment of students pursuing full-time Geomatics education. The interviews were conducted via Zoom by the first and second authors in December of 2022. The interviews lasted between 20 minutes and one hour. The data collection instrument and procedures were approved by the University of Florida Institutional Review Board, and all participating students were made aware of their rights as participants in this research. Students ranged in ages, backgrounds, and experience, including traditional college-age students and working professionals who are going back to school mid- or late-career. Preliminary qualitative data analysis revealed that the interviewed Geomatics generally have high levels of support for their enrollment in the UF Geomatics program and for their career goals going forward. Some students noted financial constraints as a major obstacle and many of them address this by working full time or relying on student loans and scholarships, including the GeT-STEM stipend. However, students also noted a lack of time as an obstacle to their pursuit of a degree in Geomatics, especially if they had outside work. Further analysis of this data will include line-by-line coding using relevant social science theoretical frameworks. This analysis will not only inform the progression of the GeT-STEM

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program but will also provide important insights for recruiting students into the UF Geomatics program in the future. In addition, we believe that these results, coupled with future iterations of data collection from students, will be useful for other STEM programs interested in increasing low-income student recruitment, enrollment, retention, and successful graduation.

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